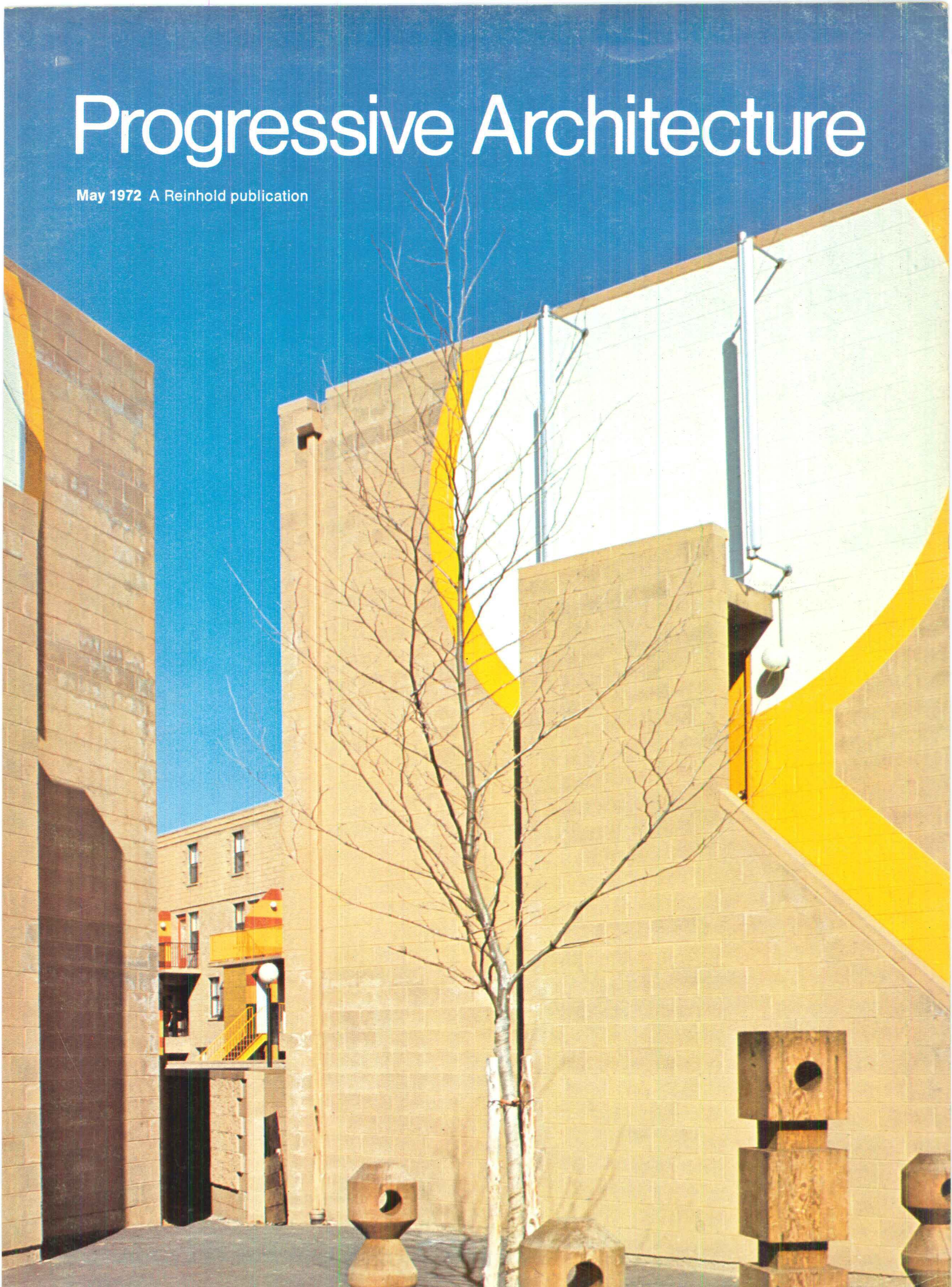
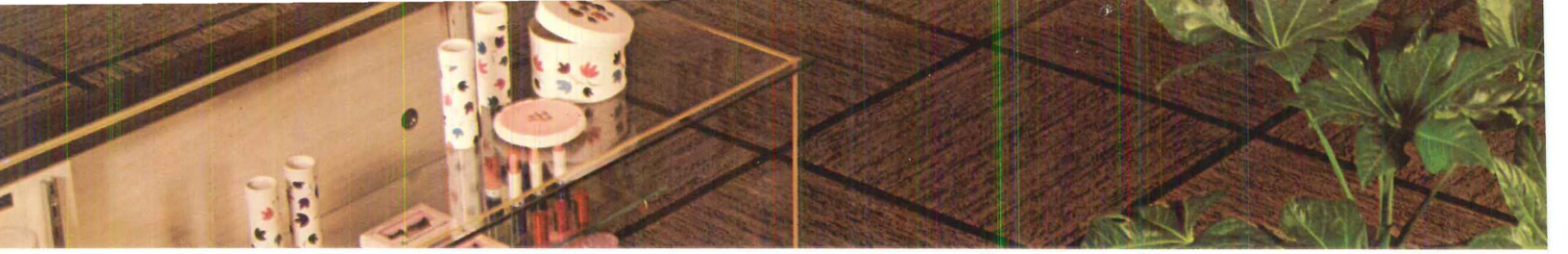
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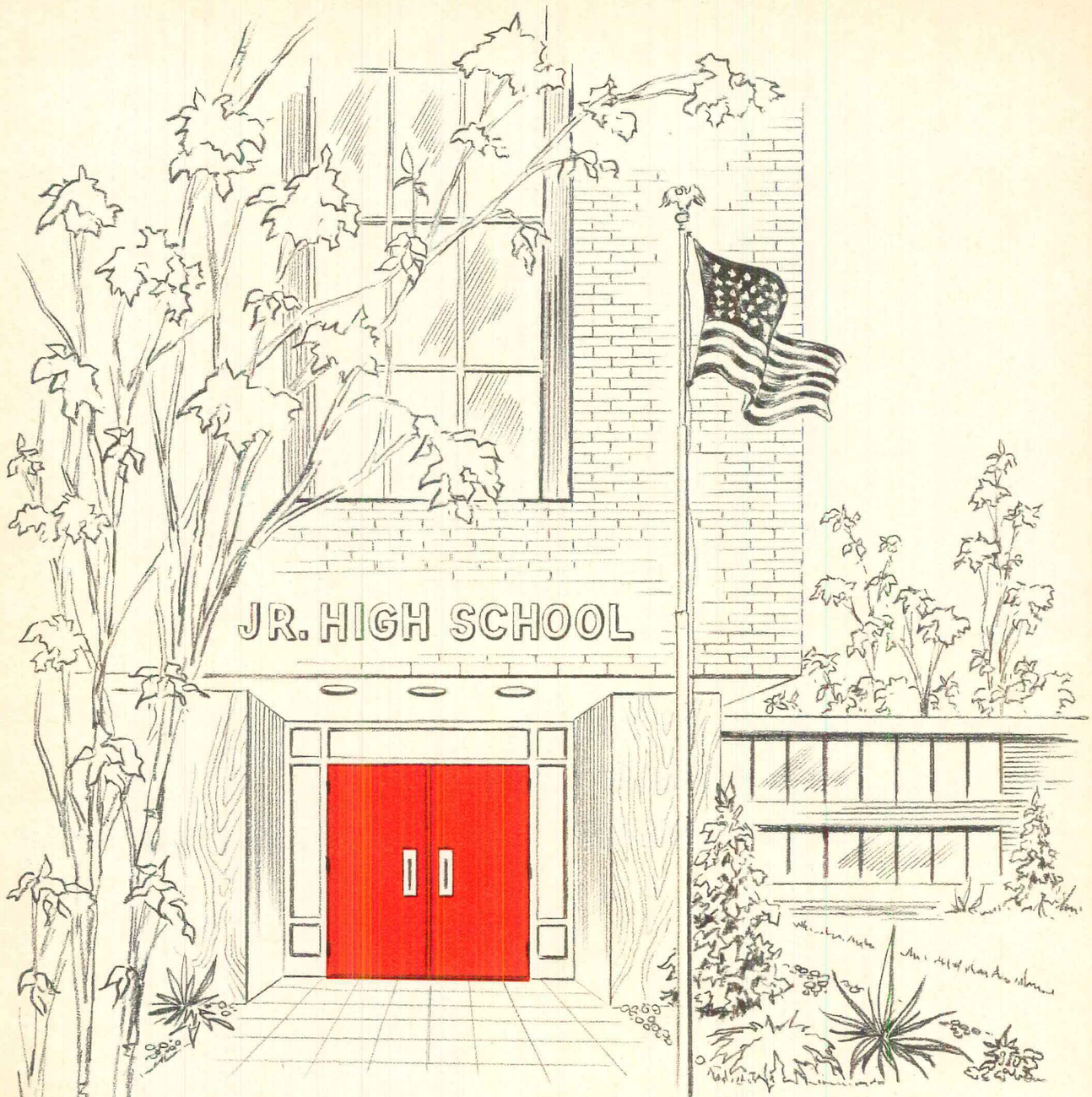
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JERRY PRZEWLOCKI



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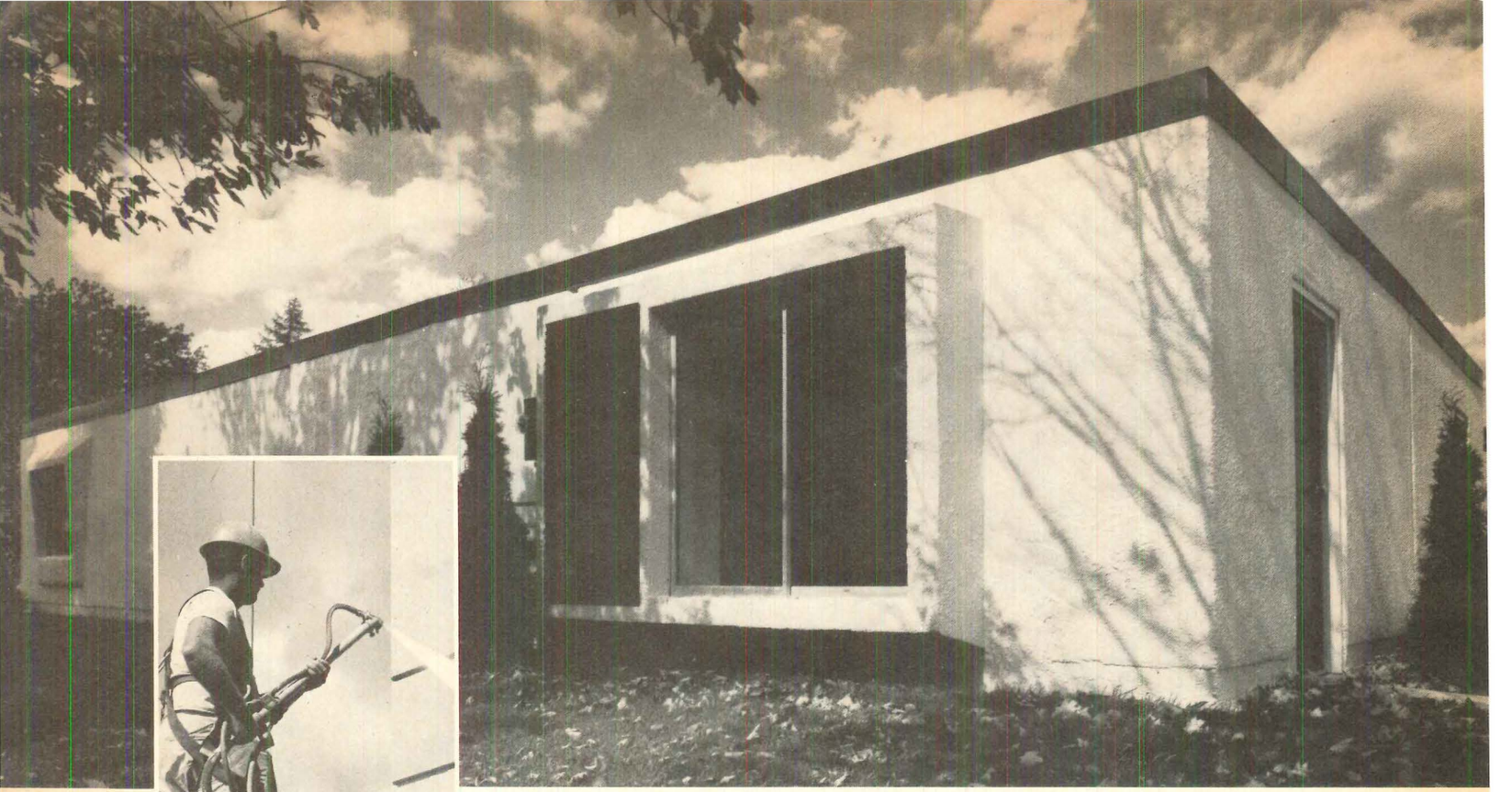
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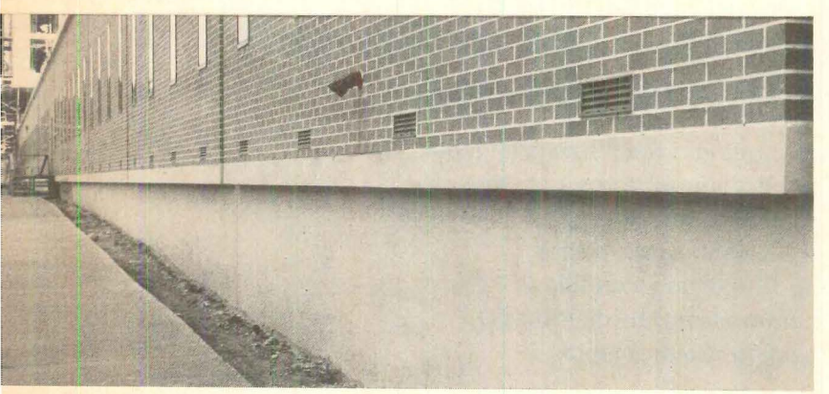
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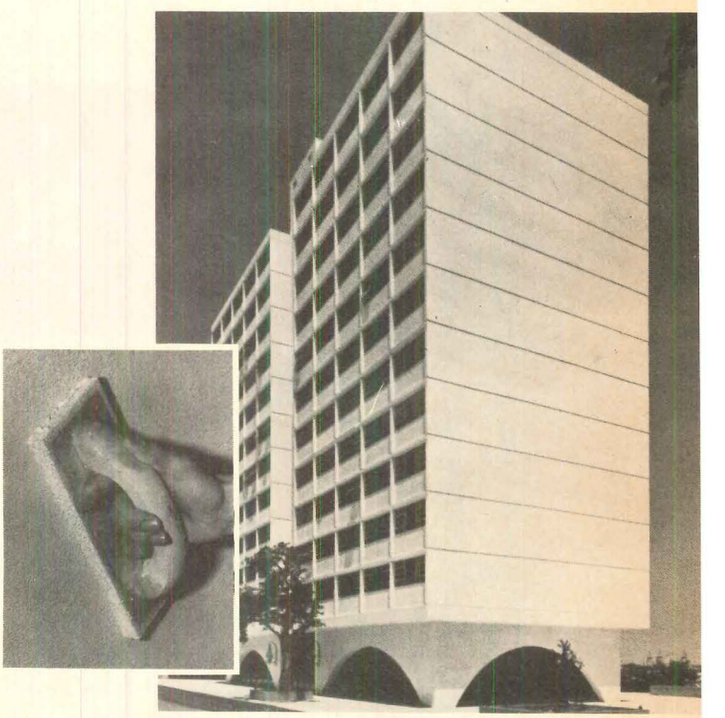
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Progressive Architecture

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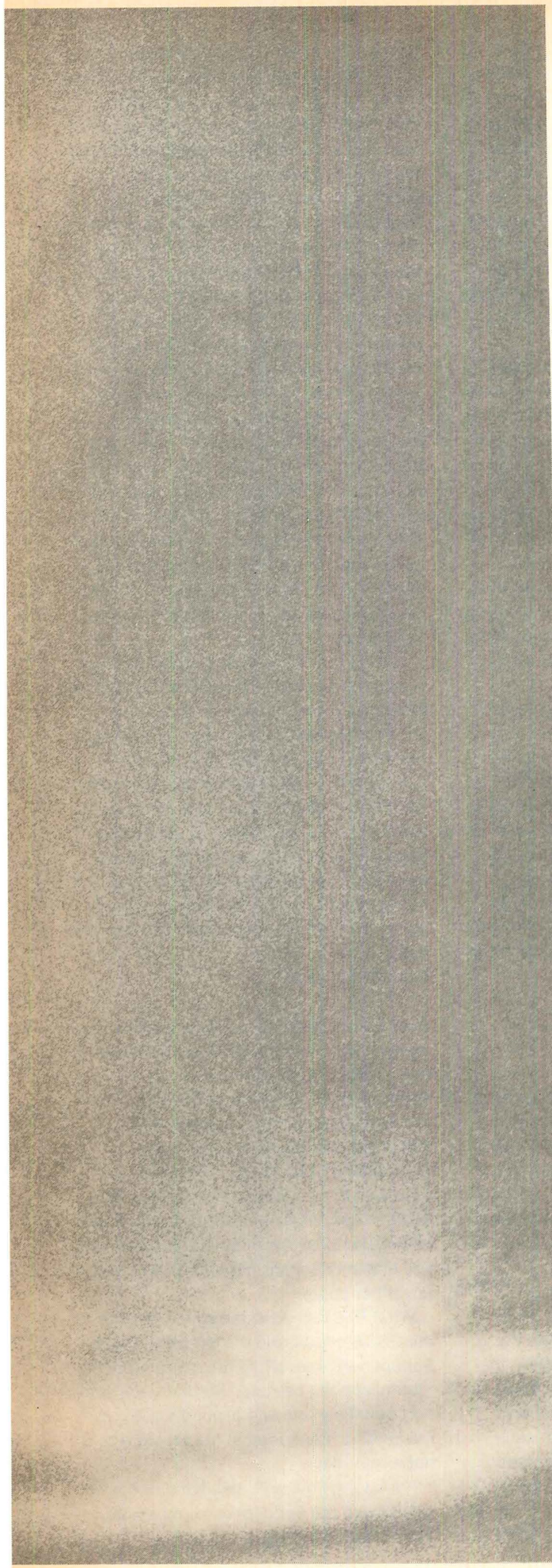
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Cover: End wall graphics at Church Street South Housing, New Haven, Conn. Photo: A. Wade Perry


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Views

Awards transcend boundaries

Dear Editor: Your January Awards issue, having withstood the rigors of a no-doubt tempestuous North Atlantic crossing, has finally reached us here in Paris and is generating some waves of its own among both French and American personnel. Both you and the jury are to be congratulated for a presentation in which the jury comments are equally as stimulating as the projects premiated. It was reassuring to note that serious consideration was given to the directions that architecture and planning *should* be taking and in this respect the Awards have an importance which transcends national boundaries and current stylistic vogues.

Ronald Bechtol
Marcel Breuer Architecte
Paris, France

Learning centers

Dear Editor: In an incredibly pretentious article entitled "Learning through Design," (P/A, Feb. 1972, p. 84) the author provides little evidence that the two centers featured enhance learning or how more attention is directed towards the needs of the children in the designed centers than in the 36,000 centers deprived of assistance.

The Office of Education is equally irresponsible for alluding to a model center for 50 children at a cost of $125,000 (remodeling) part of which came from EFL. Is it likely that EFL will continue to contribute to the thousands of children's centers required or that local low-income communities can raise $125,000 to support child care for 50 children? Most of the centers presently in operation are in church basements or in used buildings. Typical working budget in the South and Southwest is about $40,000 for a center accommodating 60 or more children, usually with infant care provisions. While this figure cannot be compared to the cost of urban construction, it is clear that a model center should rely on design ingenuity to which community groups with greatest need can be served. It is also evident that children's centers are the best case for participatory design where parents, children, students, teachers, architects can plan, design and build together in order to add a much lacking dimension in the learning experience of children.

Furthermore, if it were not for the children in the photographs, there is precious little in the way of evidence that the centers were designed for or are used by children. It should be common knowledge by now that developing a positive self-image is a cardinal need and one mode of its expression is by the child's personalization of his environment. Unfortunately, the environment does not reflect the presence of children. Similarly, the fixity of the few learning centers circumscribes many children's activities, yet may exclude others due to its permanence.

In closing, it might be noted that with all of the best of design intentions, the developmental goals and teaching models are perhaps more instrumental in fostering children's learning. While I am a strong advocate of the environment as a stimulus for children's exploratory behavior, I believe that *Progressive Architecture* has a responsibility to its readers to provide substantive support for its assertions while developing a more authoritative discussion of its selections.

Henry Sanoff
Associate Professor of Architecture
North Carolina State University

[*The following letters are in rebuttal to Professor Sanoff. Ronald Haase was partner-in-charge and Clark H. Neuringer, project designer, Hammel Green & Abrahamson, architects for The Block School, Brooklyn, N.Y., and the U.S. Office of Education Day Care Center, Washington, D.C. Ed.*]

Dear Editor: It would be good if Mr. Sanoff's reaction to "Learning Through Design" was more enlightening than the article he berates and which he terms "incredibly pretentious." Since the article does not attempt to be a definitive thesis on designing *all* child-development centers, it seems unfair to criticize it for being no more than a reporter's description of two such centers.

However, after sorting out Mr. Sanoff's complaints, I find I agree with his basic point that people ("teaching models") and ideas ("developmental goals") are the most important ingredients of effective learning. What we have attempted in both the Brooklyn Block School and the U.S.O.E. Demonstration Center is to heighten their effectiveness by providing a designed environment that will allow people and ideas to work together well.

In every project our office has undertaken we have asked our clients, both adults and children, to define the way in which they see these ingredients working together best. We have never abdicated our professional design role, however. I find Mr. Sanoff's concept of "participatory design" misguided. If he sees the architect working with his client as joint members of a creative team, fine; so do I. But—if he implies that three-year-olds and their parents have mystical insights into physical design that are more reliable than those his fellow design professionals can muster—this is dangerous.

I sense that Mr. Sanoff's real complaint is with the budgets we had to work with on these two projects. Indeed, they were larger than most we have had to work with ourselves. And unfortunately the P/A article gave the impression that these budgets were "realistic" and "to serve as an example for others to follow." I would not have said this. What each of our clients does hope to demonstrate is not tight budgets but effective learning and teaching in an environment designed to help this happen, not hinder it.

Ronald W. Haase

Dear Editor: Although there are some areas in Mr. Sanoff's letter which are accurate, I strongly disagree with his misconception of the role that EFL has played in the design and construction of the Office of Education's Demonstration Day Care Center. The function of EFL in this case was to provide some resources during the planning and design phase. They have never provided financial support for any phase of construction for this center or any other center.

What EFL has done though, with both the USOE center and the Brooklyn Block School, was to assist in the planning of two "found space" centers. Without such support definitely one and probably both of the centers mentioned in the article would not exist today.

For a long time, EFL has been deeply involved with the concept of found space. In-

[continued on page 10]

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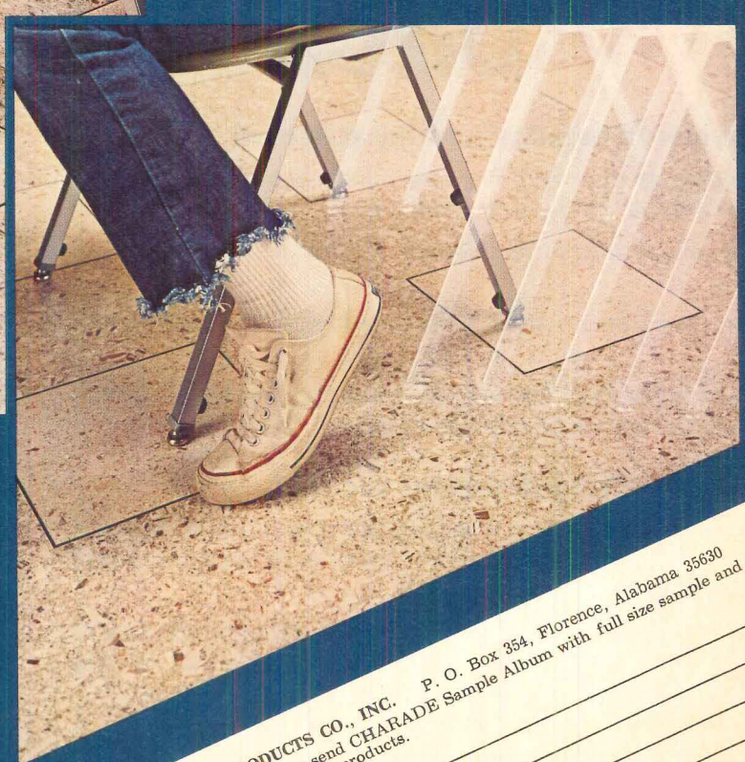
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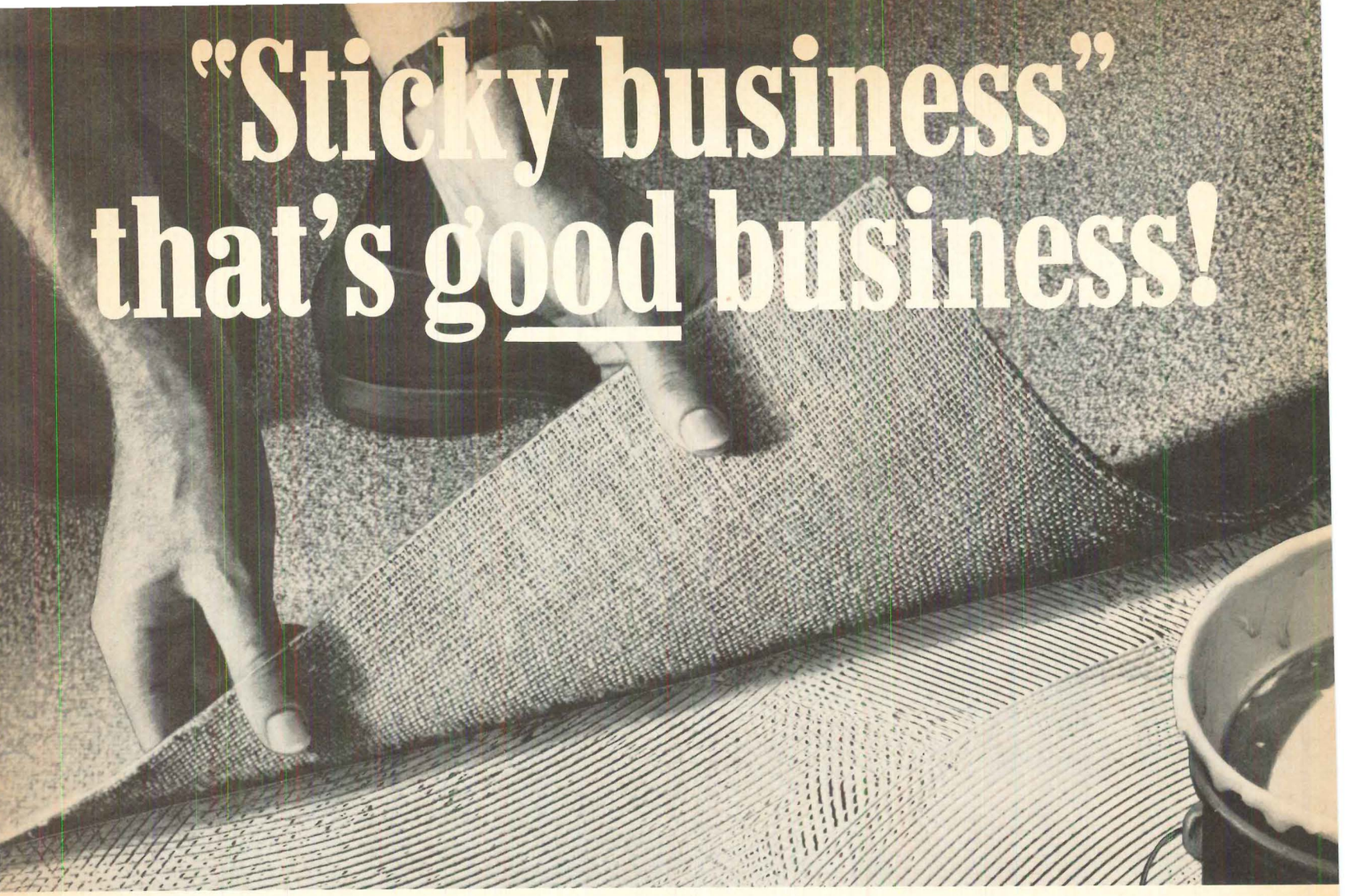
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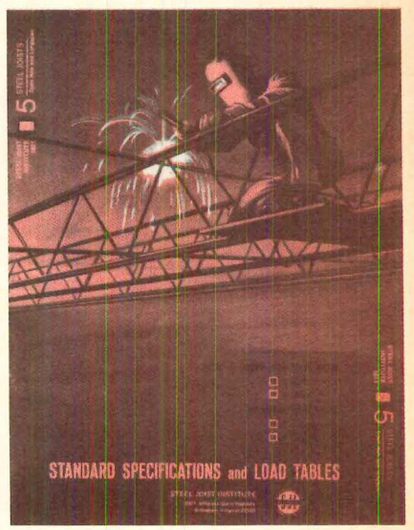
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Views continued from page 6

deed, it is a necessity in any large urban city to seek out buildings which have outlived their original usefulness in order to provide new programs for the communities; vacant land is unavailable. It is an advantage in suburban communities to consider found space, because it is economically ahead of new construction.

Because of the commitment by EFL to found space, they will be issuing a booklet in a few months entitled "Found Space and Equipment for Children's Centers." In conjunction with this, I feel that the two centers featured in the article substantially confirm the feasibility of found space as a viable concept.
Charles H. Neuringer

Graves and Eisenman
Dear Editor: P/A did right to give serious extensive treatment to Graves and Eisenman. Furthermore, your own writing was amazingly clear for concepts which could easily be obfuscated. (P/A, Mar. '72, p. 68).

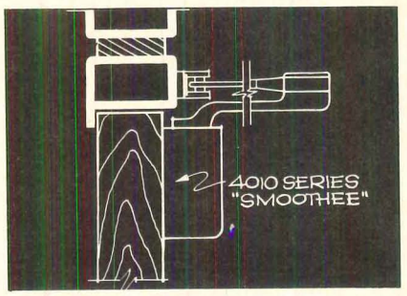
It is a healthy discipline for us all that the basis for organizational and aesthetic judgments be plumbed seriously from time to time, and debated. More facetiously, there is a positive utility in having good designers who can pre-empt the field of words where many bad designers are also playing.

If I were to suggest a higher level of discussion, it would be that the romantic/perceptual element of the design be represented by human activity and improvisation rather than by built-in architectural or sculptural forms. Architects tend to believe the world is under their control.
Robert S. Sturgis
Cambridge, Mass.

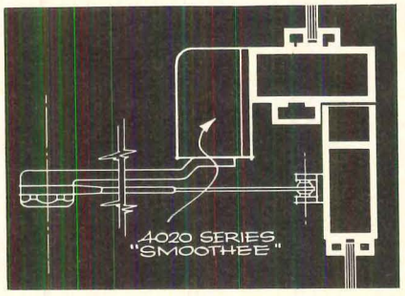
Dear Editor: I have looked at the architecture of Mr. Eisenman and Mr. Graves and they make me all the more certain that the architecture of ideas is dead.

The only response to their present action that seems appropriate is a story John Cage tells about a man with a prize iris garden. Every year he adds the most unusual varieties he can find and throws away the most common. Then his friends tell him about another more beautiful iris garden, and he jealously inquires who the owner is. It turns out to be the man who collects his garbage. Be careful, Mr. Emperor, of those new clothes.
Bruce Davis
Chicago, Ill.

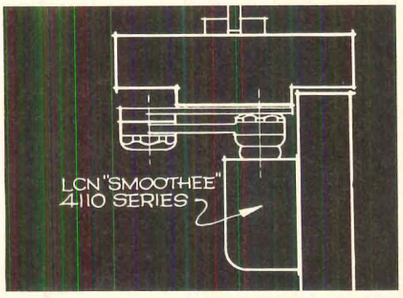
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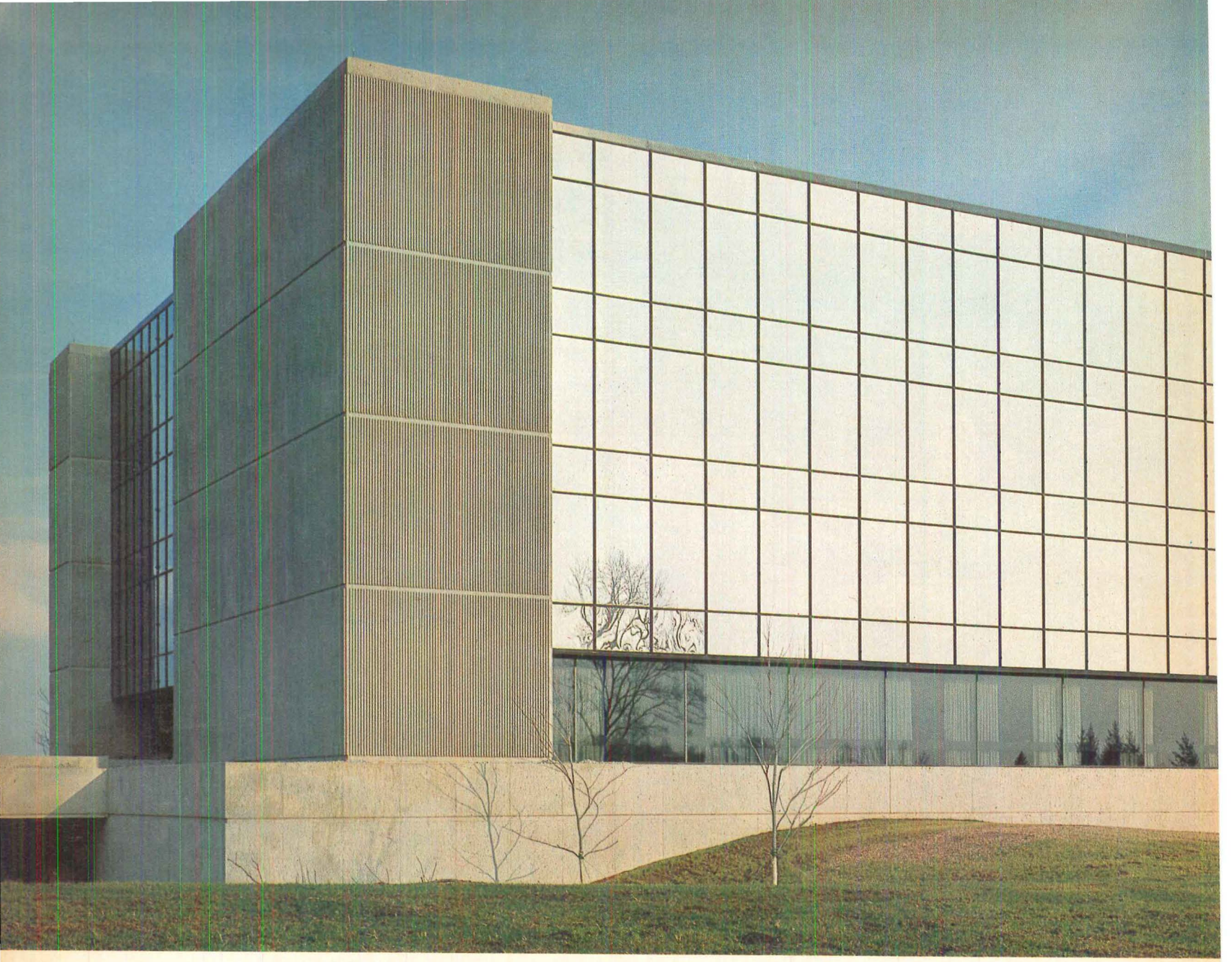






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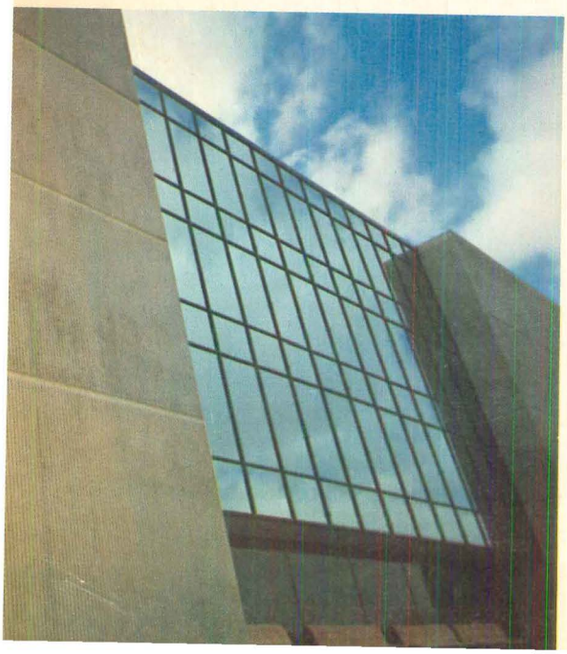
Architects Kellam & Foley took full advantage of Vari-Tran's reflective qualities when they designed the Ashland Chemical Co. Headquarters Building. Located on a spacious open tract at Dublin, Ohio, the building presents an ever-changing facade to passers-by.

Of course, they also knew that because Thermopane® insulating units made with Vari-Tran reflect the sun's heat and light, they reduce the size of air conditioning equipment needed. To say nothing of cutting operating costs.

Which is to show that in architectural glass as well as everything else—handsome is as handsome does.

We'll be glad to tell you the rest of the story (including the fact that Vari-Tran now comes in gold, silver, grey, blue and bronze tones). Drop a note to Libbey-Owens-Ford, Toledo, Ohio 43695.

Building changes by the day, hour, the batting of an eye.



Owner: Ashland Oil, Inc. Architects: Kellam & Foley, Columbus, Ohio.
General Contractor: Martin & Nettrour, Pittsburgh, Pa.
Glazing Contractor: Ohio Plate Glass Co., Columbus, Ohio.

LOF GLASS

L-O-F making progress... in architecture.

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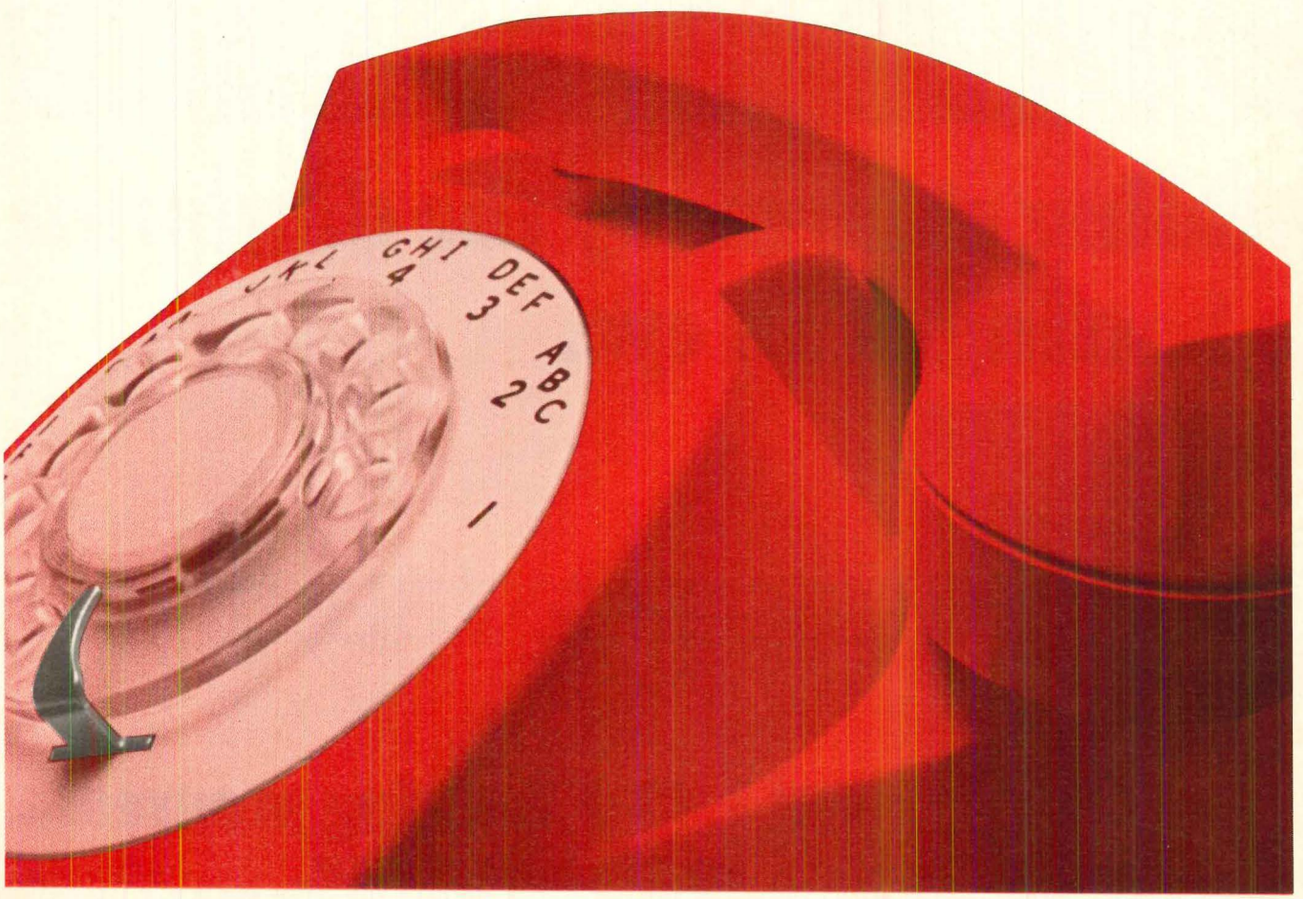
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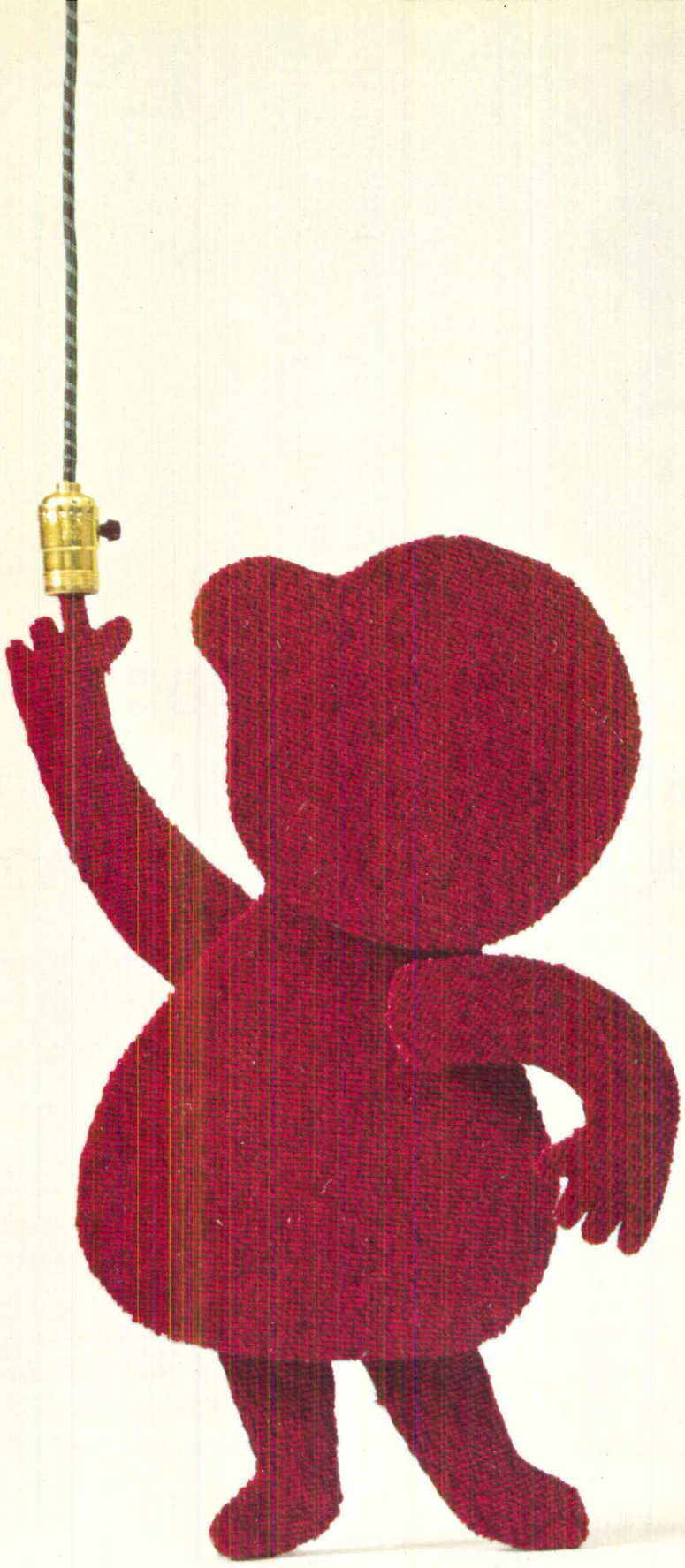
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ACRILAN® 2000+

ACRYLIC

IS STATIC RESISTANT

Acrilan® 2000+
ACRYLIC

is static resistant, but it sure adds spark to this hospital.

In the new "therapeutic corridor" at South County Hospital in Wakefield, Rhode Island, you can touch a doorknob or a switch without a flinch.

But there's more to static resistance than that.

Carpets that build up static charges attract dust particles, get dirty quicker and are harder to clean. What's more, they can interfere with delicate electronic instruments.

Acrilan® acrylic 2000+ is virtually static-free under normal conditions. In fact, no other carpet fiber claims lower static discharge than Acrilan 2000+.

Carpets of this rich, glowing fiber are uniquely suited to hospital use for another major reason: their resistance to stains. Acrilan 2000+ has been tested with more than one hundred hospital stains *and* their solvents.

Because the color is locked in the fiber, not applied after it's made, carpets of Acrilan 2000+ came through in great shape.

As a result, South County Hospital was able to use this handsome carpet throughout the corridor, in patient rooms, and even up the walls in places.

Expensive? Not at all.

According to the Hospital's Administrator, there is a 50% savings in maintenance costs over tile.

For more information to help you specify carpeting of Acrilan 2000+ fibers, turn the page.

There's nothing there but facts.

For Acrilan 2000+, that's enough.

ACRILAN® 2000+
ACRYLIC

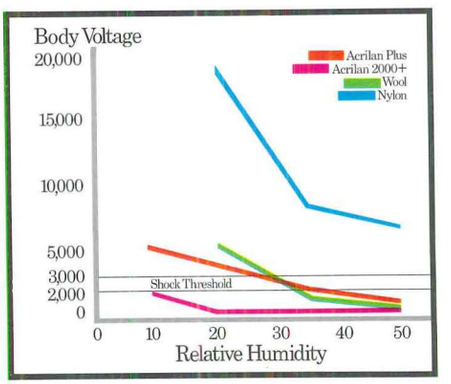


FACTS TO HELP YOU SPECIFY ACRILAN®PLUS AND ACRILAN®2000+

ACRYLIC

DURABILITY

In the many tests that measure durability, including abrasion and stair wear, Acrilan Plus and Acrilan 2000+ outperform wool by at least 30%. But durability means more than abrasion resistance. It means the ability to keep a rich, new look despite a long period of hard traffic and difficult soiling and fading conditions. Acrilan was first introduced in carpeting fifteen years ago. Many of the original installations are still in place, still look young and beautiful. And that's the best proof of durability.



STATIC RESISTANCE

Acrilan Plus offers exceptionally low static build-up and discharge rate. But where this factor is of great importance, specify Acrilan 2000+. Under normal conditions, carpets of Acrilan 2000+ are virtually static-free. This eliminates discomfort from touching metal objects and cuts down on interference with delicate electronic equipment. It also makes for a carpet that stays cleaner, because there is no static build-up to attract air-borne dust and soil.

STYLING

Did you ever notice how similar in appearance continuous filament nylon contract grade carpets are? Carpets of Acrilan Plus and Acrilan 2000+ on the other hand have decorating versatility unsurpassed by any other fiber. Carpets made with Acrilan® acrylic fiber, in fact can be tufted, woven, knitted or fusion bonded in an endless variety of designs, textures and colors that make possible a kaleidoscope of stylings. All this with the added benefit of being non allergenic, moth proof and mildew proof that comes from being a clean synthetic fiber.

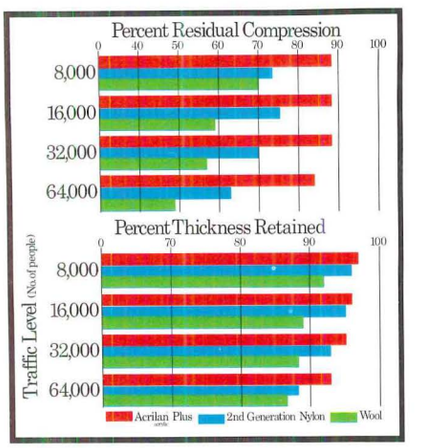
EASE OF MAINTENANCE

Acrilan Plus has a smooth, hard surface that gives dirt particles no place to cling to. It vacuums easily and beautifully. It is non-porous and hydrophobic (resists moisture absorbtion). Many spills wipe up without a trace. Acrilan 2000+ has the added advantage of color locked in the fiber. Because each fiber is colored all the way through, even the harshest detergents can be used without any bleaching effect.

FLAME RESISTANCE

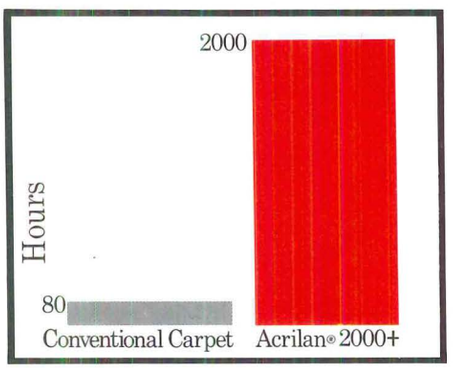
Government standards for flame resistance are currently being re-evaluated. But for now, stringent requirements are still in effect. Hospitals that receive any kind of federal assistance must comply. Jet aircraft carpeting must meet stiff F.A.A. regulations. Many states and localities have their own requirements for schools, nursing homes and college dormitories. Acrilan Plus and Acrilan 2000+ now have built-in fire retarders that give carpet manufacturers the capability of meeting all government requirements.

ACRYLIC



RESILIENCE

If a carpet fiber is not resilient, does not "bounce back" after compression, the carpet will tend to look worn long before real wear occurs. Acrilan Plus and Acrilan 2000+ have the ability to recover after long periods of compression under heavy furniture, as well as the ability to come back after side compression, such as that caused by heavy traffic.



COLOR FASTNESS

Contract carpeting should have colors that stay bright, don't fade under tough conditions. Acrilan Plus performs well, even where food, drug or chemical spills are a problem. It has good resistance to both acids and alkalis, and can be safely cleaned with any ordinary cleaning agent. For tougher jobs, consider Acrilan 2000+. We tested it with nearly one hundred hospital stains and their solvents without affecting fiber tenacity or color. In sunny locations with large glass areas, there is nothing to beat this fiber. 2000+ is a Weatherometer rating, showing no fading after 2,000 hours of burning noon-day sun. For comparison, the industry standard for normal carpets is 40 hours. The plus in Acrilan 2000+ indicates that some of our colors rate up to 6,000 hours on this standard industry test. So you can see that we are being modest in naming this fiber.

ACRILAN® acrylic PLUS
THE NEW EXCELLENCE IN CARPET FIBER BY
Monsanto

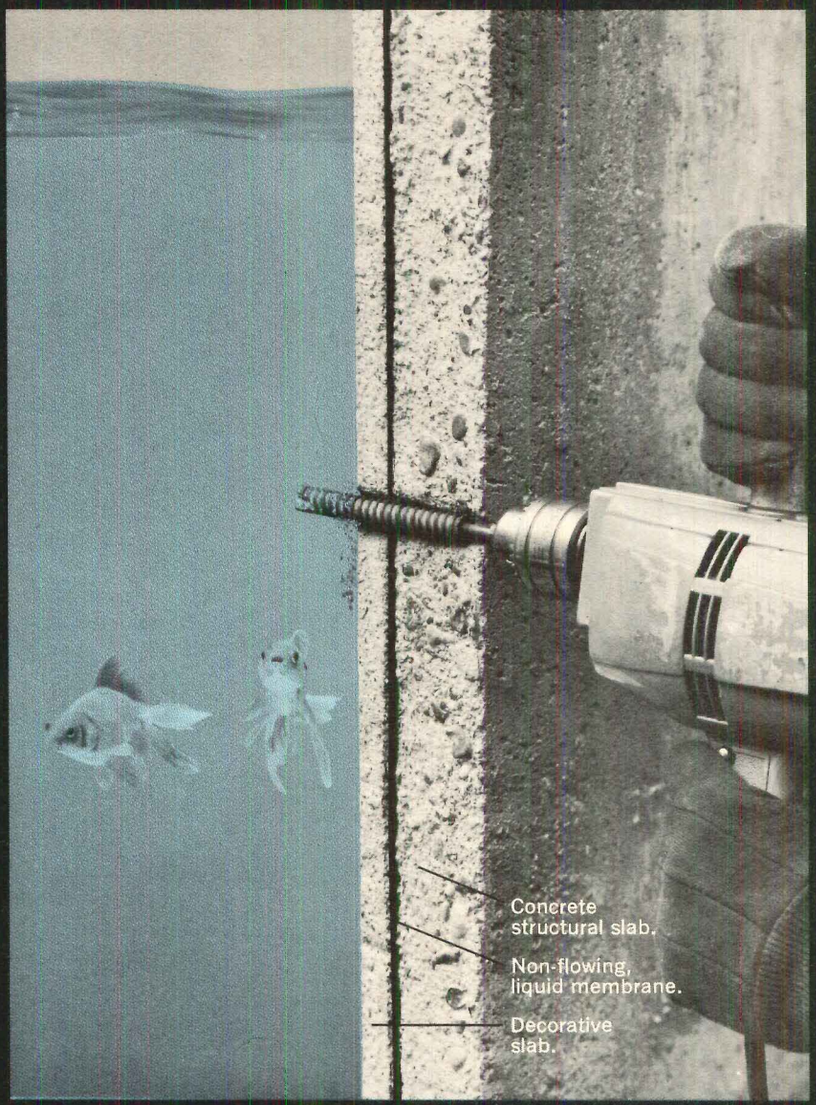
ACRILAN® acrylic
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2000+

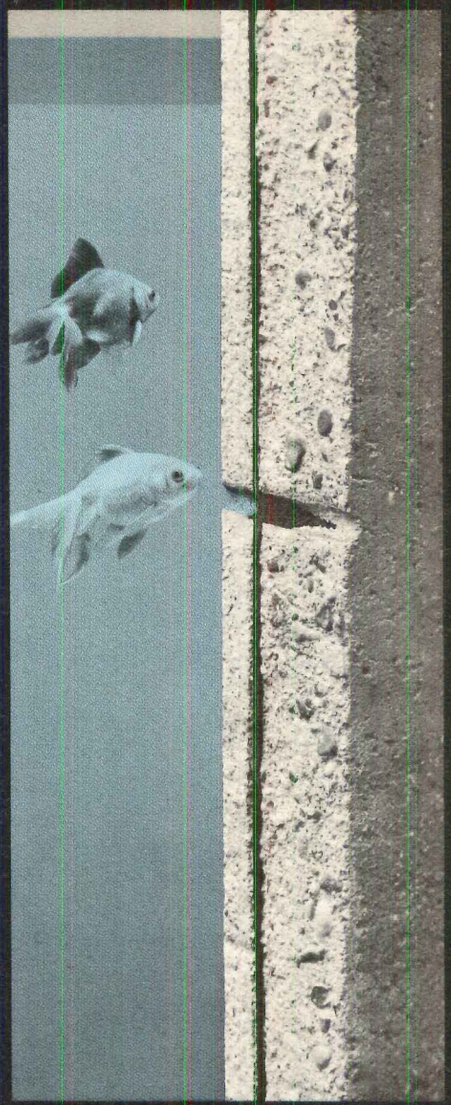
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For additional information circle No. 130 on Readers Service Card or write Monsanto.

You can drill through our liquid membrane.

But you can't put a hole through it.





Concrete fish tanks probably aren't in your line of design, but it shows exactly how positively waterproof our liquid membrane is.

The Uniroyal liquid membrane is a hot-applied, rubberized asphalt compound that bonds securely and continuously to any sound, horizontal or vertical surface. Water can't get through or under it.

The waterproof membrane remains flexible indefinitely and self-heals if mechanically damaged. It bridges moving cracks up to 1/16 inch without reinforcement. Yet *it's non-flowing* once applied, making it the ideal waterproofing for vertical applications.

Expansion joints are effectively sealed with liquid membrane and rubber reinforcing sheets.

Uniroyal liquid membrane is quickly applied in temperatures down to 0°F. It spreads and flows freely to conform to all surface irregularities.

As for actual applications, the sky's the limit. Uniroyal liquid membrane has been used to waterproof everything from underground garages to high-rise buildings.

If you've got a job coming up that requires reliable between slab waterproofing, we'll help you make your design watertight. Just fill in and mail the coupon.

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ASP NO. 1430 PA-5

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Marble/China makes her bath a showplace

She responds to beauty . . . wants the unusual. It's there with the rich elegance of Marble/China.

Genuine vitreous china with the beauty and warmth of marble. Makes any bath outstanding. Different. Luxurious. Cleans and wears like the fine china it is—and like Michelangelo's marble, the veining goes all the way through.

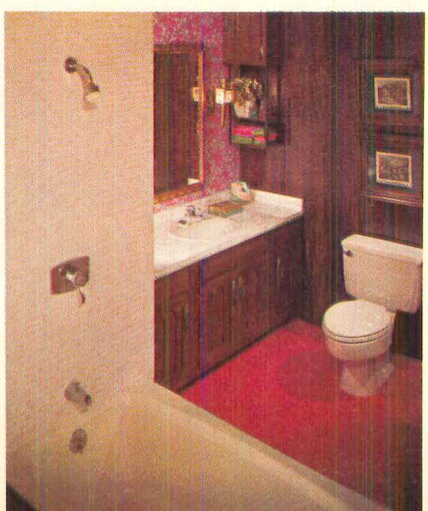
With Marble/China, her bath becomes a showplace. She'll love it.

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Vase is the Imperial Mei P'ing of the Emperor Yung Cheng 1722-1735

American–Standard Marble/China. The best keeps getting better.

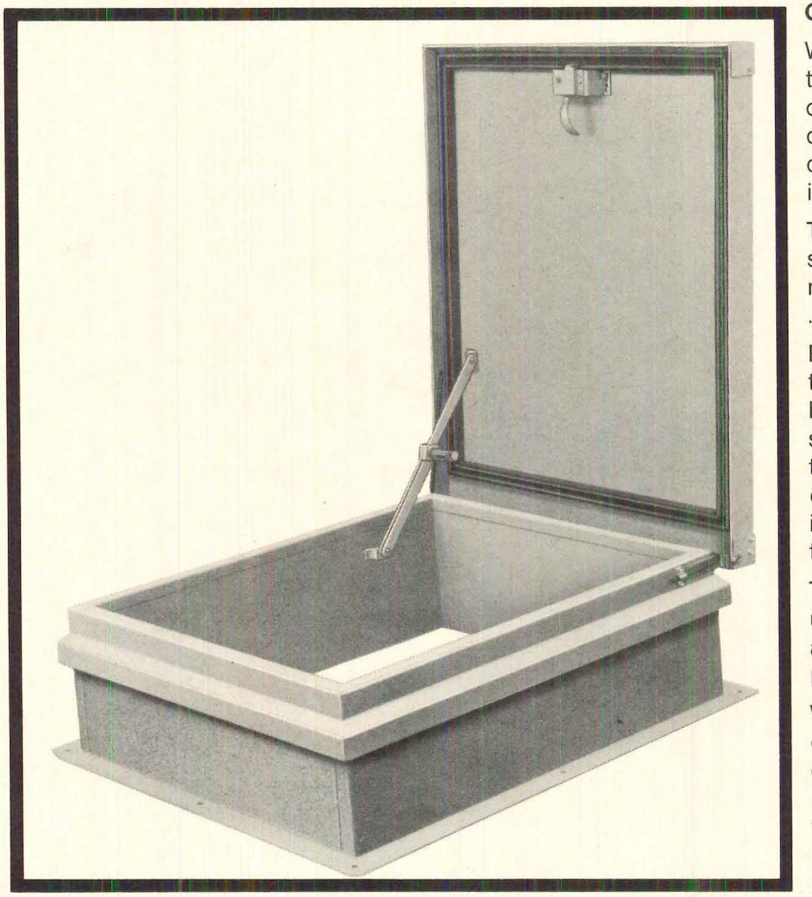
AMERICAN STANDARD
PLUMBING / HEATING



Available in Ultra lavatory, Aqualyn lavatory, elongated Cadet toilet with Church marble-pattern seat.

All product names
are trademarks
of American-Standard

look what Milcor® has come up with now:



the unobstructed roof hatch

One improvement led to another.

We started out to improve the thermal transmission rating on our roof hatches. Our engineers did that by changing to a different type of insulation in the cover.

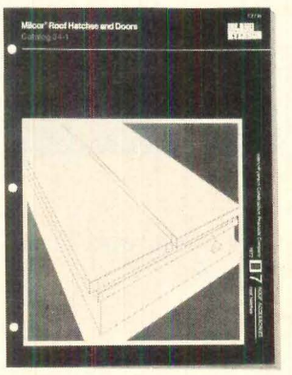
That permitted using a stressed skin design for the cover, making it more rigid... stronger ... and lighter.

Reduced weight meant that the torsion spring operators that help lift the covers could be smaller... could be moved into the covers so they'd no longer obstruct the opening... making it easier for people or materials to pass through.

That's how the Milcor unobstructed roof hatch came about. It's available now in the popular 3′-0″ x 2′-6″ size.

Write for descriptive literature... or for catalog 34-1, describing our complete line of Milcor hatches, heat and smoke vents, floor doors and sidewalk doors... or for catalog 33-1, describing our complete line of Milcor wall and ceiling access doors.

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General Offices: Chicago, Illinois

A member of the INLAND steel family

A2-34-1

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On Reader Service Card, circle no. 340 →

Despite the fact that apartments are filled with young people, no cabinet manufacturer has ever really designed a line to reach that specific portion of the market.

Until now. At Del-Mar, we've developed Overture. The first cabinet line that's both provocatively young in design and solidly based in sales potential.

Its doors are laminated on all sides with attractive and practical white polyester. Its end panels and frame are ebony black. These two basic colors in Overture will highlight any color appliances, floor coverings or accessories. And the new, bright colors in counter tops make a perfect marriage with Overture. Self-closing hinges, solid end panels and three point drawer suspension round out Overture's beautifully efficient styling.

In other words, if you've got designs on this young market, we've got the design for you.

Del-Mar
THE CABINETMAKER

CERTIFIED CABINET NKCA

If you design your kitchens to appeal to people over thirty, you've just missed over half of your market.

Del-Mar Cabinets by U.S. Plywood, a division of U.S. Plywood-Champion Papers Inc.



Magee's Carpet Lab. v

That line "Who-needs-a carpet lab?"
is handed out by 98% of the mills who don't
have one for testing.

For them it's cheaper to say "Who needs-one?"
than put up money every year to run one.

With the way the government and clients
are checking into carpet claims, what protection
do you get from a "who-needs-one?"

Magee who's had a lab for over 25 years
asks...
"Shouldn't you find out?"

To find out, all you have to do is,
the next time the "who-needs-one" walks in, test him
below against the testing Magee does.

Does he test every raw material purchased?

Does he test and check his yarn 17 times?

Does he test yarns for strength and weight?

Does he test the carpet at the beginning of a run
no matter what the yardage is?

Does he test for tuft bind?

Does he test the backing?

Does he test the latex?

Does he test the colors so that the color sample you're
selling from is what will be delivered?

Does he test his carpets with a sun test, so the
colors won't fade from a sunburn?

Does he test for wearability and cleanability?

Does he test for flammability?

Does he check for static?

Does he check his testers?
Better yet, does he have testers?

Does he or doesn't he?
If he doesn't get someone who does...
a Magee representative.

Why take chances? Test us. Write to—
The Magee Carpet Contract Department
919 Third Avenue
New York, N.Y. 10022

"Who-Needs-a s. Carpet Lab."

Does he?	or	Doesn't he?
☐		☐
☐		☐
☐		☐
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NOW! A stain made thick to cover and protect in one coat.

less mess, drip, splatter.

Today's emphasis on the natural look demands a better way to stain. Now you can get it from Glidden.

Glidden's new Spred® Exterior Solid Color Stains combine natural appearance with improved durability. You can "scoop" this thick-bodied stain out of the can and brush it on in less time, with less waste. Hides and covers bare wood and most colors in one coat.

Penetrates deep to protect.

But won't drip or splatter like thin stain. New penetration control formula uses rich, fade-resistant pigments added to highest grade linseed oils. Start-and-stop lap marks are minimized.

Select from 36 naturally handsome wood tones in these new solid color stains. Or choose from 36 clear, sharp colors in the conventional semi-transparent stains which are fortified with wax for superior weather protection.

GLIDDEN COATINGS & RESINS
ARCHITECTURAL & MAINTENANCE
CLEVELAND, OHIO 44115

SCM SCM CORPORATION

Glidden



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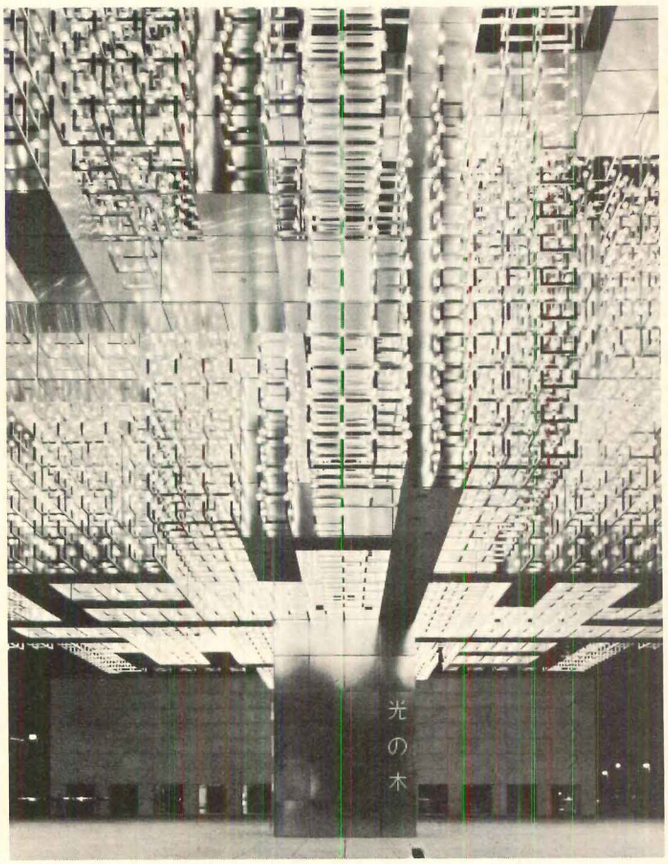
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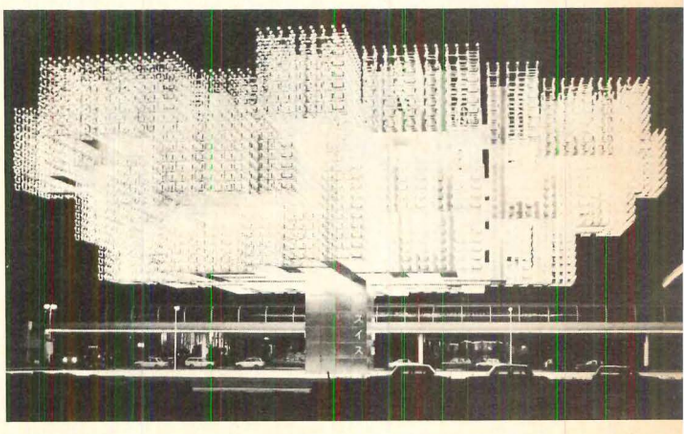
Swiss architect wins 1972 Reynolds prize

Willi Walter of Zurich, Switzerland is this year's R.S. Reynolds Memorial Architectural Award winner, given for "Radiant Structure," a lighted aluminum tree that was the focal point of the Swiss exhibit at Expo '70 in Osaka. Walter will receive a $25,000 honorarium and an original aluminum sculpture by James Prestini.

Walter's winning structure has a core, or trunk, or prefabricated steel, faced with rolled aluminum sheet; the branches are of bright anodized aluminum tubing, with 60,000 right angle joints. The branches carry 32,000 electric light bulbs, 6 in. in diameter, which are switched on in stages to muscial accompaniment. A dozen concealed speakers broadcast the music, and blowers force cool air upward from the lower part of the structure. Supported by a foundation of reinforced concrete, "Radiant Structure" measures 180 ft across and 72 ft high.



"Radiant Structure" wins Reynolds Award



HUD announces art competition

Works of art "suitable for public spaces which have the potential to complete overall design concepts and solve functional problems, while reflecting the identity and uplifting the spirit of the community" may be entered in an art competition recently announced by the Department of Housing and Urban Development. Three entry categories have been set up: interior—works suitable for installation in public lobbies, corridors of housing projects or community facilities; pedestrian—works for exterior courts, plazas, etc.; city—works scaled for viewing from cars, trains or other vehicles at gateways to cities; or for defining major sections of a metropolitan area.

Entries must be postmarked by midnight, May 31, 1972; further information is available from National Community Art Competition, HUD, Washington, D.C. 20410.

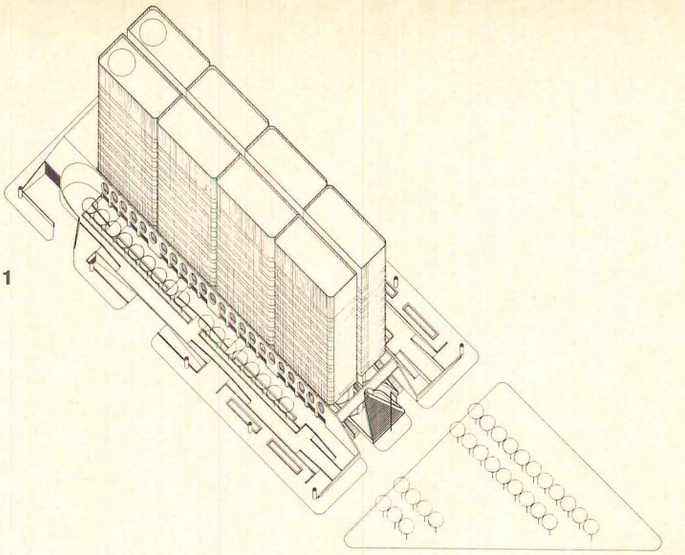
CSI convenes, installs new officers in June

Change seems to be one of the constants in the construction industry and it is behind the theme for this year's CSI convention, scheduled for June 19–21 in Minneapolis. The official theme is "Specifications, Response to Change," and the program will focus on changes in construction—ones that are already visible and ones that can reasonably be expected. Talks will explore performance specifying, testing criteria

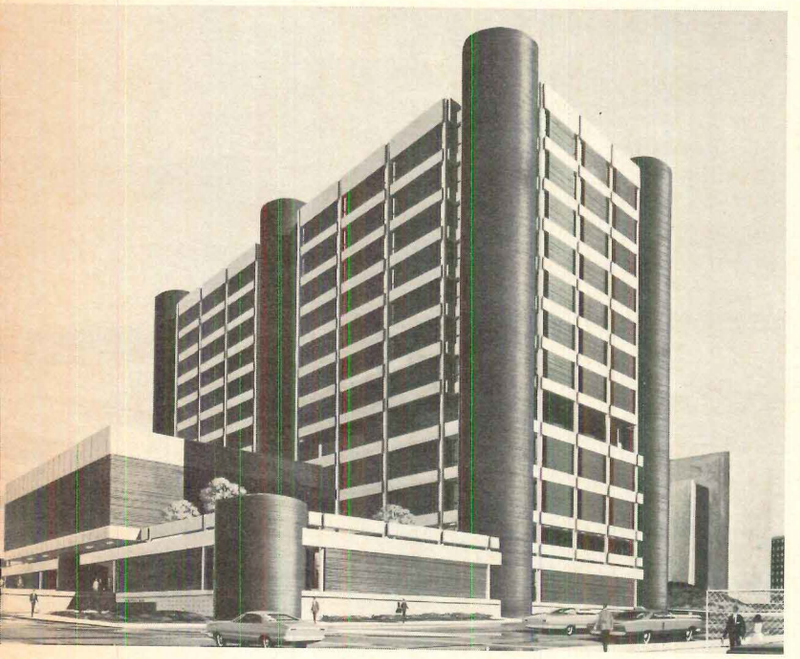
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Buildings on the way up

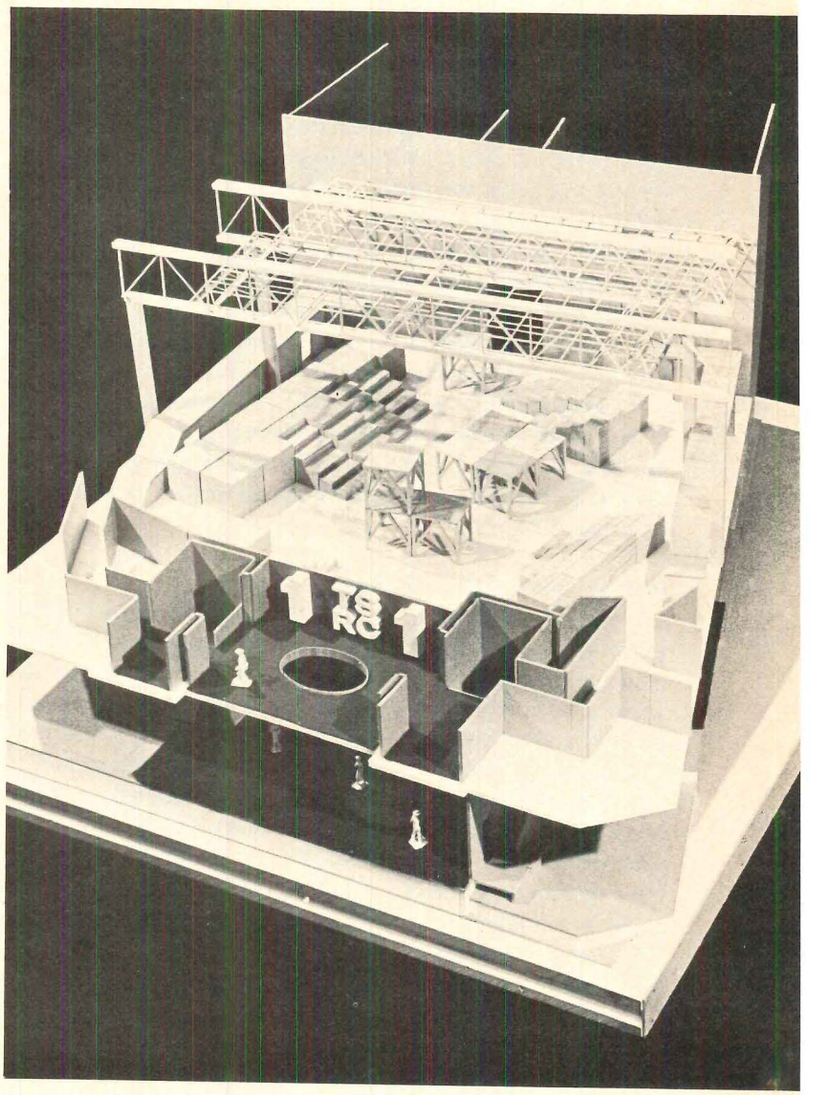
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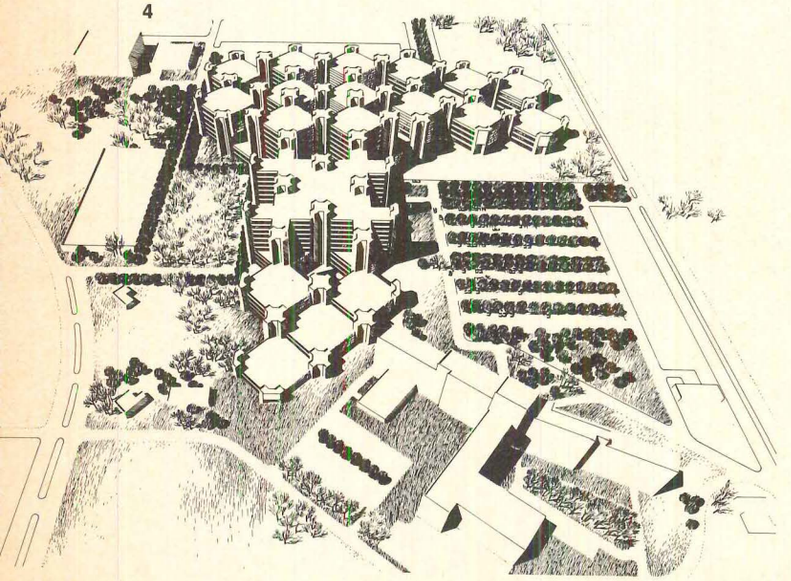
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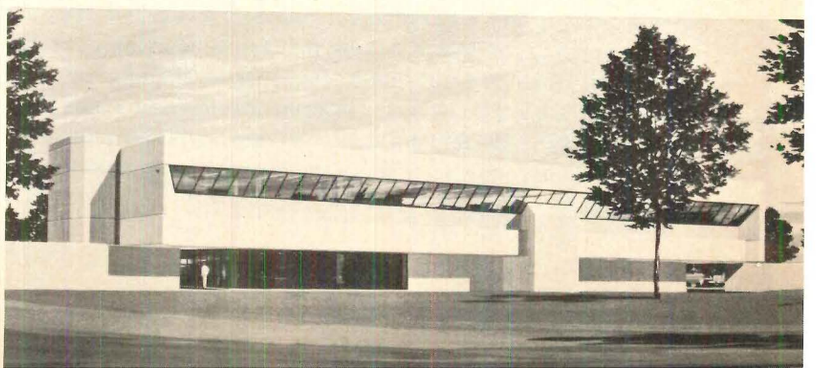
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4



5



1 Complex program requirements and a desire to meet human needs led architects for Colorado Blue Cross and Blue Shield headquarters to put fixed area spaces and parking in base structure of terraced gardens and multilevel public lobbies. Office towers will be built in pairs above the garden walls and on both sides of central spine carrying utilities and pedestrians as well as being part of the structure. Base structure will be reinforced concrete, with post tensioned slabs; walls will be sandblasted. Towers will have lightweight steel frames, aluminum and reflective glass curtain wall. Architects are The Ken R. White Co. with Muchow Associates as design consultant.

2 First phase of complex designed for Georgia State University School of Urban Life fills city block and provides close to 2 million sq ft of space. It is designed to give free public movement on lower floors, more restricted access to private offices on upper floors. Lower floors are tied into existing street and traffic pattern and superimposed through a series of plazas and bridges; they provide a central link in the overall campus platform. Building includes a 500-seat auditorium and a variety of conference areas, all linked by audiovisual equipment. Above mechanical floor are seven stories of offices and research areas for School of Urban Life, School of Education and School of Allied Health Services. Mechanical areas, stairs and toilets are contained in large vertical cylinders. Architects are Finch Alexander Barnes Rothschild & Paschal Inc.

3 Former movie palace will become home for Trinity Square Repertory Company, in Providence, R.I. Old theater will be renovated to include a small theater on the lower level, and a larger, more flexible performance space on the upper level. Architects for the project are The Providence Partnership.

4 Activity modules, to be built by industrialized techniques and to provide flexible, changeable facilities, are basis of design for University of Wisconsin Medical Center in Madison. Designed by Hellmuth, Obata & Kassabaum, complex will replace existing teaching hospital and become state's chief medical and paramedical training center. First phase will provide 736,000 sq ft at cost of $45 million; it calls for a modular core design of five floors designed for vertical and horizontal growth.

5 First building of 27-acre transportation center that is to be part of Fairlane, planned community being developed by Ford Motor Co. subsidiary near Detroit, will be a reservations center for United Air Lines. Two-story building will provide about 36,000 sq ft of working area. Between floors, an 18 in. free access area will house the cable network for computer equipment on both floors. Designed by Rossetti Associates, Inc., building will have steel frame and precast concrete and glass exterior.

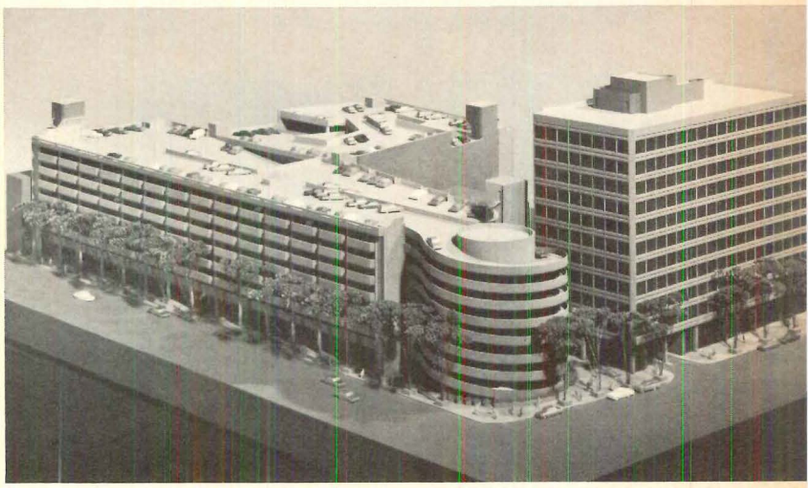
6 Demolition has started on what used to be the 71st Regiment Armory in New York City; when site is cleared, the New York City Educational Construction Fund will build a $47 million mixed use structure, combining a high-rise office tower and a high school. The school will fill the lower nine floors of the building and accommodate 2500 students; United Medical Services, Inc. will be the major tenant in the rest of the 41-story building. School itself will cost $27 million; debt service on school bonds will be paid by Fund from income from air rights above school and payment in lieu of taxes from office tower. Office tower will have its own plaza and lobby area; school and office will function independently. Architects are Shreve, Lamb & Harmon Associates.

7 Double helix ramp provides an express exit from 9-level, 1800-car garage designed for Rochester, N.Y. by Chloethiel Woodard Smith & Associated Architects. Some 20,000 sq ft of commercial space, fronting on an enclosed pedestrian concourse and street arcade, are provided, along with underground link to nearby office complex. Future plans call for an office building adjoining garage. Frame is post-tensioned concrete, using chemically prestressed cement; exterior is precast concrete.

8 Competition winning design for Cathedral Church of St. Paul in Burlington Vt., calls for textured concrete exterior and skylights to light the congregation area and altar. Bells from the former church, which had been destroyed by a fire, are placed in the tower; bluestone from the earlier building is used in the new garden. Designed to take advantage of the sloping site, the cathedral has a parish hall seating 200 people below the church proper. Architects are Burlington Associates.

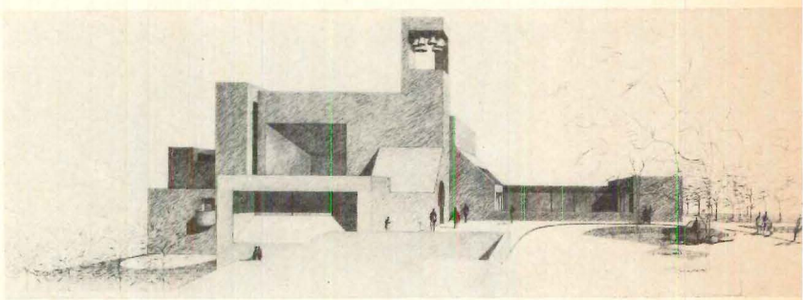


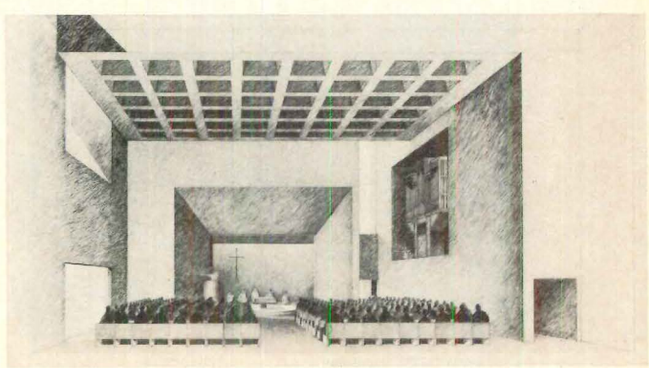
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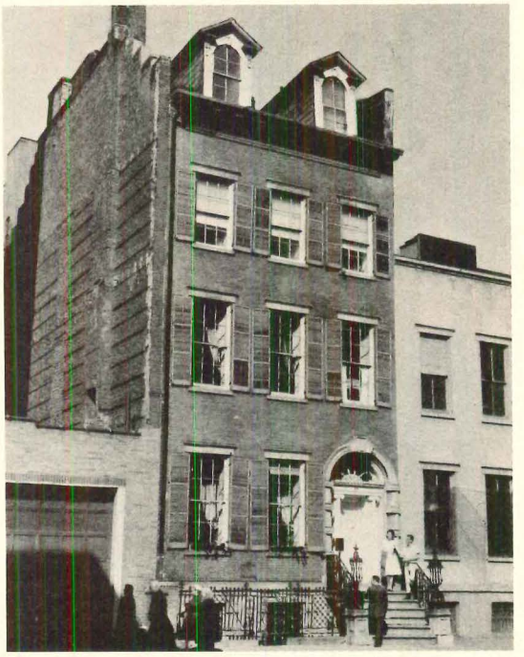
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Basilica of Santa Maria della Salute, Venice



Fresco, Sanctuary of "Madonnone," Arezzo: 1920, 1955



Old Merchant's House

educational and technical programs for specifiers and industry's response to the changing construction industry.

Shortly after the Minneapolis convention, a new slate of officers will take over. John C. Fleck is the new president; Larry C. Dean, Herman R. Hoyer and Robert E. Vansant are vice-presidents and Clarence H. King, Jr. is treasurer.

Too late to be saved?

The photomural exhibit on Italy that opens this month at the Metropolitan Museum of Art in N.Y., and tours the U.S. during the next two years is not the usual, government sponsored, show of pretty Italian design or beautiful art and architecture. Organized by architects Robert Brambilla and Renato Bazzoni through the Italian Art and Landscape Foundation—a group similar to our Sierra Club—*Italy, Too Late to be Saved?* deals with Italy's cultural and environmental resources, showing specifically how these resources are falling into decay while little attention is being given to their preservation.

The primary goal of the exhibit is to focus attention on preservation problems within the context of causes and effects of the environmental struggle. It is only through a broad understanding of the problems, the show's organizers believe, that any meaningful dialogue can be established that might ultimately lead to the proper kind of legislation that is so sorely needed. Because the interrelationships are so clearly and alarmingly spelled out in this exhibit, the show provides a superb case-study model for other countries to follow.

The exhibit does not focus on the individual object or urban settlement as an artifact to be restored or preserved—unquestionably important but ultimately only a stop-gap measure. Instead, it concentrates on the causes that bring the environment, both man-made and natural, to such a tragic state of decay. It shows, for example, how chemical pollutants in the air have caused paintings to deteriorate more in the last few years than they have in the hundreds of years since they were first painted; it shows how those same poisons are eating away at the very fabric of ancient buildings and towns; and it shows how the senseless destruction of woods and forests cause water drainage and erosion problems that can be the primary cause of floods such as occurred in Florence in 1966.

This exhibit is warning, hopefully before it is too late, not only of how every act of man's insensitivity to his environment helps to destroy the ecological balance, but how eventually this carelessness will turn on him to destroy his own home, his own city, or his cultural heritage, as it is doing in Italy. Legislation, which can only come about through public awareness, is needed not only in Italy but in other countries as well, and it is needed quickly because "someday soon" is going to be much too late.

NYC Greek Revival classic being restored

As a start toward turning the Old Merchant's House, considered New York City's finest example of 1832 classic Greek Revival architecture, into a neighborhood museum, architect Joseph Roberto has begun work repairing and renewing the exterior walls and the roof. Deteriorating brick will be replaced, brick joints will be pointed, a new roof installed, gutters repaired; the aim is to protect the interior plaster from dampness and seepage now coming through the walls.

A major part of the restoration will be strengthening the heavily ornamented drawing room ceilings, part of the still-in-

[continued on page 37]

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A recent survey on rental rates shows office space is expensive: $7.50 to $10.50 per square foot in San Francisco. $5 to $9.50 in Philadelphia. $5.50 to $10 in Chicago. $5 to as high as $18 in New York City. For example, empty aisles in a six unit storage bay can easily add $1000 a year to office costs. The Fullspace movable storage system can pay for itself in months.

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News report continued from page 34

tact original interior. Old fashioned wedge-shaped nails lose their grip after years of traffic vibration, Roberto discovered after the collapse of a ceiling in a Washington Square row house. To combat that, Roberto literally ties the ceiling structure together with wire. Working from the floor above to avoid damaging the ceiling, he removes floor boards, which are numbered and marked on a plan. Galvanized tie wires are passed around each wood furring strip where it crosses a beam and then looped and twisted taut onto nails or lag screws in the sides of the joists. A similar technique was recently used on a ceiling in Philipse Manor, Yonkers, N.Y.

The initial restoration work is covered by a small federal grant through the New York State Historic Trust; matching funds have been added by a variety of donors. Another federal grant of about $15,000 will be made if matching funds are received by the Restoration Committee.

After the structural repairs are made, the museum committee of the Decorators Club will turn its attention to interior restoration. A mill has been found to duplicate the original richly patterned moquette carpet, believed to have been woven to order for the house from an 1850 design.

Co-op housing group hosts West Coast meeting

While AIA members are convening in Houston this month, government officials and leaders of cooperative housing groups are in San Francisco for the sixth annual Co-Op Housing Institute. The meeting is sponsored by the Mutual Ownership Development Foundation, which encourages co-ops as a solution to housing problems: they are less costly to build and maintain, the foundation says; turnover is lower than in other low-income projects and mortgage defaults are less frequent.

The meeting will cover such topics as the advantages and disadvantages of limited dividend, nonprofit and co-op housing; criteria for selecting occupants; counseling of occupants; management problems in housing projects. Speakers will include Gordon Cavanaugh, executive director of the National Housing Assistance Council; Washington attorney, Charles Edson; Philip R. Thompson, HUD's special assistant for co-op housing; and Paul Golz, executive consultant for Mutual Ownership Development Foundation.

Chicago group recommends prequalification of bidders

"An owner, his architect or engineer can expect to have an efficiently run construction project, completed in a minimum amount of time, and in a competent and sound manner, only if he selects contractors who are capable of performing properly," according to James C. Bort, co-chairman of the Construction Industry Affairs Committee of Chicago (CIAC). That sounds all too obvious on the surface, but what Bort is urging is prequalification of bidders, the main theme of the latest in the series of recommendations put out by CIAC.

[continued on page 38]



Long Island home; Architects: Vernon and Jay Sears, Quoque, Long Island; vertical siding treated with Cabot products.

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News report continued from page 37

Waiting until after bids have been received to determine whether the low bidder can actually do the job costs the bidder time and money, and perhaps embarrassment, if he is disqualified; if the job does go to a contractor who can't handle it properly, the owner suffers. Thus, says Bort and CIAC, it is important to know the status and qualifications of prospective bidders.

To do this, CIAC has developed a confidential bidder qualification form that covers the prospective bidder's financial status, organization, experience, availability and references. The CIAC recommendation also includes procedures for prequalifying bidders.

The benefits, according to Bort, include the assurance that the low bidder and his subcontractors will be up to the job; contractors with limited financial resources, experience or ability will be eliminated, and the number of bidders will be kept within reasonable limits.

Flow of AIA honors continues

Wolf Von Eckardt, the *Washington Post's* architectural critic has won this year's AIA Architecture Critics' Medal. The award, to be presented at the AIA convention in Houston, was given for his "continuous effort in the area of public criticism to evaluate structures, plans and programs in simple, direct language that informs both the profession and the citizens of the need for vigilance in quality and performance and the need to recognize where pressures have needlessly sacrificed the quality of urban environment."

The 1972 Critics' Citation, also to be presented in Houston, goes to Canadian author, architect and educator Peter Collins for his "continuously important creative effort in critical literature." Collins is the author of *Architectural Judgement* (1971), *Changing Ideals in Modern Architecture* (1965) and *Concrete: The Vision of A New Architecture* (1959).

Also to be honored at the convention are 10 foreign architects who have been named Honorary Fellows of AIA: Luis Arizmendi, Spain; Jai Rattan Bhalla, India; Henri Delaage, France; Sir Roy Grounds, Australia; Thomas Howarth and Jean Louis Lalonde, Canada; Vayden R. McMorris, Jamaica; Gueorgui Orlow, U.S.S.R.; Luis Ortiz Macedo, Mexico and Michael Scott, Ireland.

AIA-CEC Public Affairs Conference: good backgrounder

For the news media, the Annual AIA-CEC Public Affairs Conference falls into the category of a backgrounder—there isn't much said that is real news, but you get a good background for things that happen later. For the architects and engineers that come to it, however, it's something else—a chance to get the word from government officials at first hand, and a chance later on to visit their men in Washington, with the backing of their professional society.

This year, there was a little bit of excitement, some of it caused simply by the presence of Senator Edward Kennedy as a luncheon speaker, some of it caused by his announce-

[continued on page 43]

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News report continued from page 38

ment that he was jumping into the fight over the West Front of the Capitol. Kennedy then outlined proposed legislation aimed at setting new priorities for civilian science and technology. The $2 billion bill would provide funds for research in specified areas; aid to government units, corporation and individual engineers to switch from defense and aerospace technology; and provide loans to unemployed scientists and engineers.

Other speakers looked at other aspects of government policy and procedure. Senator William Proxmire, assessing the price and wage control effort, said government should pay more attention to the big unions and corporations who have the power to set wage and price levels, and let smaller competitors compete. Representative Jack Brooks, a favorite, urged architects and engineers to mount a bipartisan effort against competitive bidding. Representative Kenneth Gray (D-Ill.) described a revolving construction fund for federal buildings, which he said could get needed buildings under construction. Majority leader, Hale Boggs, and Minority leader, Gerald Ford, summed up the status of major Capitol Hill issues. Three rounds of seminars dealt with legislation in the areas or housing, transportation, land use, labor relations and technological conversion.

AIA and building trade unions seeking closer ties

On the basis of some common concerns in the building industry, the AIA's Labor Liaison Task Force and the Executive Council of the AFL–CIO's Building and Construction Trades Department have kicked off a series of meetings aimed at developing a close working relationship between the two groups. Representing the unions are the presidents of 10 of the 17 unions in the department, along with the department's president and secretary-treasurer. Heading the AIA group is George M. White, Architect of the Capitol; other task force members include Francis Kelly, Hilliard T. Smith, Jr., James A. Scheeler, William L. Slayton and William M. Linscott.

At the moment, the biggest product of the meetings has been grand statements. "The group is prepared to discuss anything submitted by either side," said Robert A. Georgine, secretary-treasurer of the Building and Construction Trades Department, "which will be helpful in creating a friendly and constructive relationship between the architects and our affiliated general presidents." Both White and Georgine said of the meetings: "We are off and running."

While running, the group will take up such potential topics as the roles of architecture and labor in industrialization of building; joint scholarship programs for apprentices or journeymen who want to become architects; balancing the needs for craftsmanship and production in urban housing; unification of the construction industry; a center for the joint study of building codes; seasonality; manpower shortages and apprenticeship programs; jurisdictional disputes; safety and construction financing.

Seattle mall: businessmen, residents, students agree

Turning a traffic-filled commercial street into a pedestrian mall is not the newest trick in the urban scene, admits James D. Cowan, but he feels the approach taken in Seattle's Uni-

[continued on page 44]

...with apologies to Kaufman and Broad, Inc. *(and other housing giants)*

Housing Giant

Kaufman and Broad, Inc., builds so much housing that every nine minutes of every working day someone somewhere in North America buys one of its homes or occupies one of its apartments. Currently the company has 60 housing developments underway in Los Angeles, Chicago, Detroit, San Francisco, New York-New Jersey, Toronto, and Paris, France. Kaufman and Broad Home Systems, its manufacturing subsidiary, produces mobile homes at seven plants. Other subsidiaries involve vacation and recreational building and government assisted housing. During the first quarter of [illegible] sales of ho[illegible]

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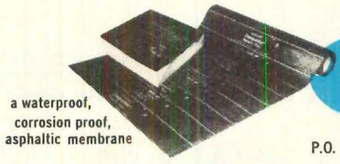
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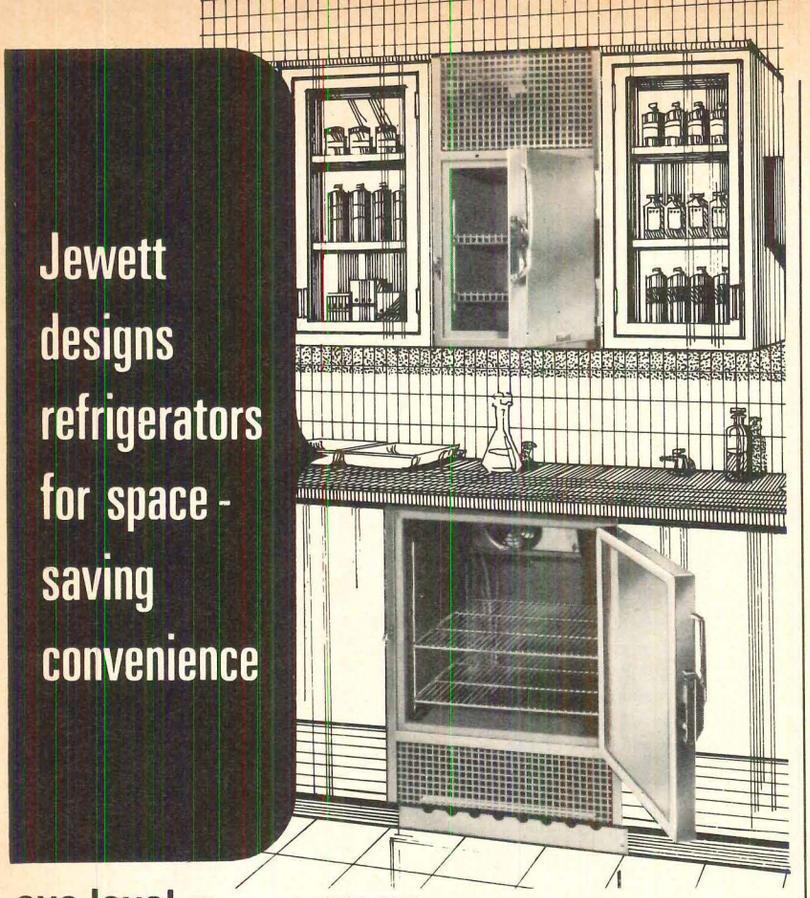


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eye level (illus. model WM-CW)

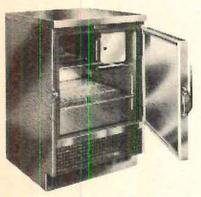
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under counter (illus. model UC-5-BC)

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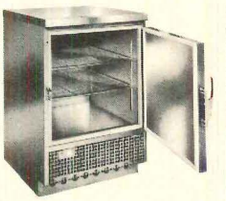
- *Gleaming stainless steel interiors.*
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LEFT: Model UC-5 Two-tray ice cuber cooling system and semi-automatic defrost.

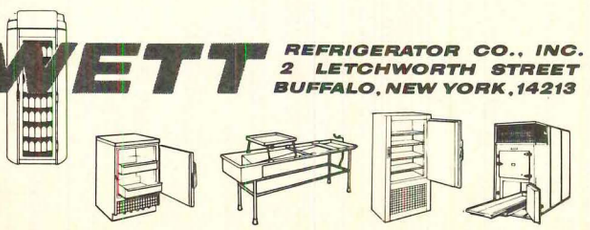
RIGHT: Model UC-5-CW Cold wall type cooling system with automatic push button defrost.

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News report continued from page 43

versity District may be unique. Cowan is a senior associate of The Richardson Associates, a Seattle architectural, engineering and planning firm which along with Joyce Copeland Vaughan as urban design consultant, Northwest American, Inc. as marketing consultant and Richard Haag Associates as landscape consultant, made up the design team for a project that seems to be supported by town and gown alike.

The project was started and funded by a group of private businessmen, Cowan says, and it relied heavily on citizen involvement; it took its direction from a citizen's advisory group representing the entire community. It differed from many mall projects in that it was not a "last ditch attempt to save a dying business community, but an attempt to better accommodate an existing condition—intensive pedestrian movement along a congested vehicle-oriented street."

University Way is the official name of the street, but locally it's known as The Ave; it runs adjacent to the University of Washington, which provides a built-in market of some 30,000 students, large numbers of whom seem to be walking up and down the street at any given time. With the students come more cars, increasing traffic and parking problems. By consolidating parking, rerouting traffic and turning The Ave into a pedestrian mall, the project design team hopes to solve these problems and provide an environment that will enhance people's activities.

"It is significant," says Cowan, "that the study does not propose the imposition of highly unifying architectural solution on the streetscape, but rather attempts to highlight the existing diversity and variety of the student-oriented community. The emphasis is on people and their activities, not on the creation of a 'beautiful' environment."

The University District's recent history has been marked by a three-way mutual conflict of values and distrust among the local business community, the local residents and the students. Getting these three widely different groups together was done through a Citizen's Advisory Committee (meetings were well-publicized and open to the public), a survey of community attitudes administered by University's division of community development, Citizen Goal Study committees and continual monitoring of the design team's progress in community meetings. "Dialogue between diverse segments of the community was initiated," Cowan says, "conflicts were identified and solutions and compromises discussed." The city's departments of engineering and community development contributed staff time to the project.

The result is a plan which seems to enjoy the support of all segments of the community, Cowan says. "In an area where recent city-sponsored arterial improvements and public redevelopment projects have been blocked by community interest groups and voted down by residents, the level of support for a proposal which was at first very controversial, has been surprising. There's no doubt that this success is largely due to emphasis on citizen participation in the planning process."

Awards

Nine buildings, including two large performing arts complexes, have been honored in the 1972 AIA Honor Awards program. Receiving the awards, which will be presented at the AIA con-

[continued on page 46]



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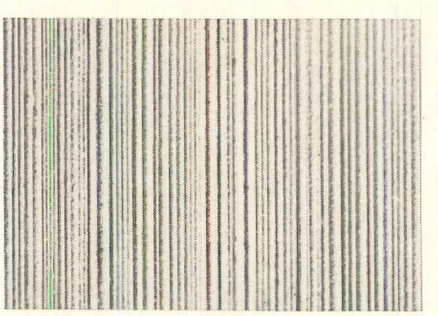
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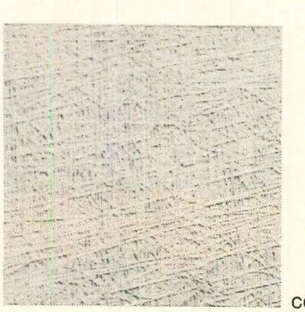
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vention in Houston are: **Edward Larrabee Barnes** (Walker Art Center, Minneapolis); **Marcel Breurer** and **Herbert Beckhard** (Koerfer House, Lago Maggiore, Switzerland); **Ulrich Franzen** (Alley Theater, Houston); **John M. Johansen** (Mummers Theater, Oklahoma City); **C.F. Murphy Associates** (McCormick Place On-the-Lake, Chicago); **James Stewart Polshek & Associates** (New York State Bar Center, Albany); **Claude Samton & Associates** (YM-YWHA Day Camp, Mt. Olive, N.J.); **Skidmore, Owings & Merrill** (Weyerhauser Headquarters, Tacoma, Wash.); **Wurster, Bernardi & Emmons, Inc.** (Ice Houses I and II, San Francisco, Calif.).

Six Michigan architectural firms won awards of honor for design excellence at the Annual Convention of the Michigan Society of Architects: **Harley Ellington Associates, Inc.** (Administration Building, City of Woodhaven, Mich.); **Ellerbe M. Smith Associates** (Monguagon School, Trenton, Mich.); **Smith & Gardner Architects** (Burroughs Corp., Detroit, Mich.); **Smith, Hinchman & Grylls, Inc.** (Bethesda Hospital, North Montgomery, Ohio); **Straub Van Dine Associates** (Troy, Mich., Public Library); and **Tarapata-MacMahon-Paulsen Corp.** (University Center Annex, University of Detroit).

Personalities

John P. Moran will assume the new title of general manager of physical planning and facilities of Princeton University, effective July 1.

David B. Murphy, AIA, was named to the U.S. General Services Administration's advisory panel on architectural services.

Sir Nikolaus Pevsner has been appointed visiting professor of architecture at Columbia University and will deliver the 1972 Mathews Lectures during the spring term.

Leroy C. Gilbert, CE, has been elected to honorary membership of the Construction Specifications Institute.

Thomas F. Galvin has been appointed executive vice president of the New York City Convention-Exhibition Center Corporation.

Ki Suh Park, vice president of Gruen Associates, Los Angeles, has been appointed to the Citizens' Advisory Committee on Transportation Quality.

James Stewart Polshek, New York City architect, has been appointed the sixth dean of the Columbia University School of Architecture.

Calendar

May–Aug. Series of seminars abroad sponsored by the Metropolitan Association of Urban Designers and Environmental Planners, Inc.

May 2–5. Symposium on the performance concept in buildings, American Society for Testing and Materials Headquarters, Philadelphia, Pa.

May 4–5. Twenty-fourth annual national engineering conference sponsored by the American Institute of Steel Construction, Waldorf-Astoria Hotel, New York City.

May 7–10. 1972 AIA national convention and exposition, Albert Thomas Convention Center, Houston, Tex.

May 8–10. Twenty-sixth annual technical conference of the American Society for Quality Control, Washington Hilton Hotel, Washington, D.C.

May 10–12. Second national conference for the building team, [continued on page 50]

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The Winners

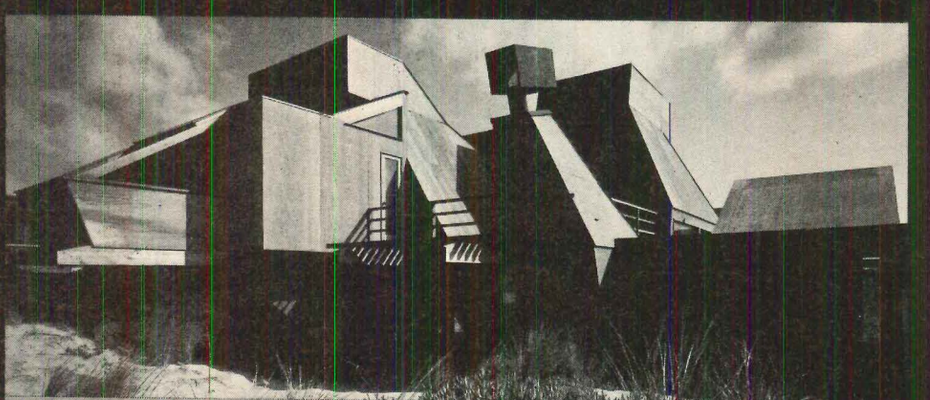
1972 Plywood Design Awards

Jury comment: "There is no question that plywood is the building material of our time in the field of wood construction. Economical, light of weight, both structure and skin, bearing its own innate finish. A simple sheet of plywood fulfills the ultimate dictum of organic design. Form and function are one."



Commercial/Institutional Buildings Top Award $1,000: Douglas Barker (Smith, Barker, Hanssen, San Francisco). Project: Corte Madera Regional Branch of the Marin County Public Library, Corte Madera, California.

"A remarkably well-detailed space frame. Its 'sawtooth' roof system frees the flexible interior spaces of internal supports and floods them with natural light."



Residential/Single-Family Buildings Top Award $1,000: William Logan, AIA, (Neil Noll, Mike Lee Associates, Palo Alto, Calif.). Project: House at Pajaro Dunes, Watsonville, Calif.

"A superb example of plywood used as the basic material throughout the building—not just as a skin."



Vacation Homes Top Award $1,000: William Logan, AIA, for another house at Pajaro Dunes.

"Although the forms are many-faceted, there is an underlying unity that gives this structure a great sense of repose."

For information on the winners and citation awards, write 1972 Plywood Design Awards, American Plywood Association, Dept. PA-052, Tacoma, Washington 98401.

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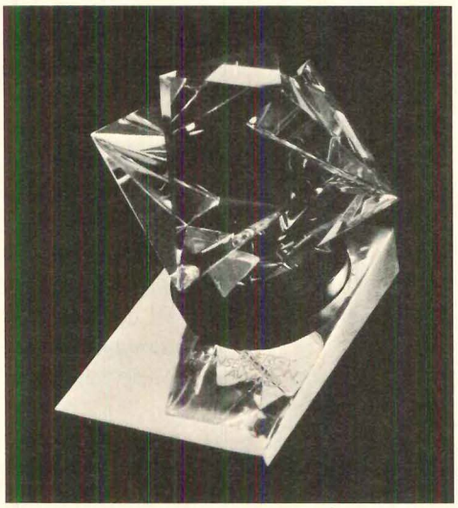
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Owens-Corning announces a special reason to design buildings that conserve energy.

Show our Awards Jury a building that doesn't waste energy—and you could win one of the Energy Conservation Awards Owens-Corning will present this year.

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We're launching this Award program because of the urgent need to conserve energy. Too many buildings waste fuel and contribute to environmental pollution.



The Owens-Corning Energy Conservation Award. "Triangles," a Steuben crystal sculpture that captures and reflects light from multiple triangular planes.

By offering Energy Conservation Awards, we hope to stimulate new ways to conserve energy. It also lets us honor the architects and engineers who do the best job of designing buildings and mechanical systems that conserve energy.

Who can enter. All registered architects and professional engineers practicing in the U.S. are eligible. As individuals or in teams. But to qualify, your entry must be a commissioned building project—in the design process, under construction, or a completed structure.

Entry categories. A winner will be selected in each of these three categories:

Institutional—schools, hospitals, and government buildings, for example.

Commercial—office buildings, shopping centers, retail stores and similar structures.

Industrial—including manufacturing plants, research centers, warehouses.

Equal emphasis will be given to all entries regardless of project size.

The use of Fiberglas* products is not required.

The Awards. Winning architects and engineers will receive the Steuben crystal sculpture shown at left. Firms and building owners associated with winning entries will receive Steuben plaques.

The Awards Jury. Winners will be selected by: MacDonald Becket A.I.A.—Welton Becket and Associates. Leander Economides—Economides and Goldberg. Harold S. Lewis—Jaros, Baum and Bolles. Professor Charles F. Sepsy—Dept. of Mechanical Engineering, Ohio State University. Herbert H. Swinburne F.A.I.A.—The Nolan and Swinburne Partnership.

Send for entry details now. Completed entries must be submitted by August 31, 1972. Winners will be notified in September. We'll make the Awards in October.

For a brochure giving complete details, contact your local Owens-Corning representative. Or write: Owens-Corning Fiberglas Corporation, Energy Conservation Award Program, Architectural Products Division, Fiberglas Tower, Toledo, Ohio 43659.

*T.M. Reg. O.-C.F.

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News report continued from page 46

Albert Thomas Convention Center, Houston, Tex.
May 14–17. Conventions of the National Association of Housing and Redevelopment Officials and the North Central Regional Council of NAHRO, at the Convention Center, Cincinnati, Ohio.
May 18–19. Institute on expansion joints in buildings sponsored by the University of Wisconsin-Extension, Milwaukee.
May 18–19. Institute on design of multifamily dwellings sponsored by the University of Wisconsin-Extension, Madison.
May 19–20. Mid-South regional conference of the American Institute of Interior Designers, Dallas, Tex.
May 22–25. Consulting Engineers Council/US annual convention, St. Francis Hotel & Tower, San Francisco.
May 22–26. Seminar on acoustics and noise control in buildings presented by Cambridge Collaborative at the Fenway Hotel, Cambridge, Mass.
May 24–26. Seminar on management strategies for architects and engineers, sponsored by Advanced Management Research International, Inc., at Regency Hyatt House–O'Hare, Chicago.
June 6–9. International Switching Symposium, Massachusetts Institute of Technology, Cambridge.
June 12–14. Seminar on managing new building projects sponsored by Advanced Management Research International, Inc., Delmonico's, New York City.
June 17–22. 1972 International Design Conference, Aspen, Colo.
June 19–21. Seminar on management strategies for architects and engineers, sponsored by Advanced Management Research International, Inc., at The Miyako, San Francisco.
June 19–21. Sixteenth annual convention and exhibit of the Construction Specifications Institute, Minneapolis.
June 19–22. Sixty-fifth annual meeting and exposition, Air Pollution Control Association, Hotel Fontainebleau, Miami Beach, Fla.
June 25–28. Seventy-second annual meeting of the American Society of Landscape Architects, Sheraton Hotel, Philadelphia.
June 26–30. Systems Building and Industrialization in the United States, Massachusetts Institute of Technology, Cambridge.
July 3–20. Athens Ekistics Month, Athens Technological Organization, Athens, Greece.
July 11–15. Annual meeting of the National Society of Professional Engineers, Brown Palace Hotel, Denver, Colo.
July 31–Aug. 1. Seminar on managing new building projects sponsored by Advanced Management Research International, Inc., at The Stanford Court, San Francisco.
Aug. 6–9. Seventh annual conference of the Society for College and University Planning, Sheraton-Biltmore Hotel, Atlanta, Ga.

Washington report

Marking time until November

Aside from some serious matters of aesthetics and history, the renewed furor over reconstruction of the West Front of the U.S. Capitol (the side facing downtown Washington) is symptomatic of a real Congressional malaise: The lawmakers
[continued on page 52]



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News report continued from page 50

are willing and eager to get involved in almost anything but matters that might affect votes in November.

While the controversy of the "front" engendered numerous floor speeches in both Houses, plus statements to the press and comments on TV and radio, Congress had not acted on a single major appropriations bill; was embroiled in a dragout fight over stream pollution; made no progress at all on resolving the metric-conversion dilemma; seemed uninterested in whether or not architects and engineers should bid to obtain government contracts; moved at a glacial pace on such items as revenue-sharing, tax reform and governmental reorganization; made no progress on any of dozens of proposed changes in Occupational Safety and Health laws or laws that seem to favor construction labor, and had only just joined a most important battle (in gingerly fashion) over the future of the federal-aid highway program.

The West Front debate is by now an old story to many. It had its genesis in the late 1960s when the late Architect of the Capitol (who wasn't an architect), J. George Stewart, reported to Congress that the old sandstone wall—last remaining visible piece of the original building—had deteriorated so badly that it had to be propped up, and should be taken care of. Stewart's suggestion: Rebuild the wall in concrete and marble about 40 ft outward from the existing wall, thus adding about 4.3 acres of interior space which could be devoted to more offices and committee rooms, tourist facilities including a new restaurant, restrooms and the like.

The idea brought an immediate howl from many quarters, including AIA and one of its then officers, George White, on grounds that the move would be desecration, that the old wall could be strengthened and repaired, that added space wasn't needed, and that the cost (then estimated at $30 million) wasn't worth the gain.

After a couple of years of debate, Congress finally appropriated $2 million for an engineering study of the situation. The resulting report (by the New York consulting firm of Praeger-Kavanaugh-Waterbury) was delivered early this year. It concluded that restoration was possible, for about $15 million, but pointed out some defects in this scheme, principally in the matter of controlling costs.

Then the real "Architect of the Capitol"—a committee composed of the Vice President, the majority and minority leaders of both Houses of Congress, and George White, now himself Architect of the Capitol—decided to go ahead with reconstruction nearly as originally proposed. The new cost is estimated at $45 million. That decision rekindled the battle, with AIA still opposed (but not attacking the "Architect" himself) and leading the pack. Proponents also trotted out some old arguments—principal among them the point that the Capitol is not a monument, but a working building, which has undergone almost constant addition and reconstruction from the day it was started.

And the House ended up by appropriating more money to go ahead with planning of the extension; so, grudgingly, did the Senate (in legislative appropriation bills).

Meanwhile, Washington was boiling along, even if Congress wasn't doing much to tend the pot. The House, for example, put through its own version of a group of stream-pollution amendments that were at considerable variance from the Senate's version, both as to philosophy and fact. The Senate, for example, wanted an absolute cutoff (in the form of "best available technology") in discharges by 1981, the House called for a two-year study by the National Academy of Sciences before any such rules are locked in to law; the Senate wants to vest most enforcement and rule-making powers in federal agencies, the House would rather keep the present federal-state "partnership" going; the House wouldn't hear of any greater public participation in decision-making. Differences were so great, in fact, that many observers thought there might be no bill at all this year—or at least, nothing but a bare-bones version to keep things going.

The same sort of a battle was started on the future of the federal-aid highway program (Congress has to settle the biennial authorizations this year). It was begun, a little surprisingly, by Transportation Secretary John Volpe, who proposed merging the so-far sacrosanct Highway Trust Fund into other funds, to make an "Urban Fund" from which appropriations could be made for mass-transit and other purposes.

Volpe's own prestige (as a former governor, highway chief, contractor [not highways], association president) helped to hold down initial criticism, and he got immediate support from AIA and some other organizations, who argued that such a central fund could really promote the idea of "balanced transportation" espoused by the Nixon Administration, rather than weighting the scales heavily in favor of highways alone. Some highway-oriented groups, such as Highway Users Federations for Safety and Mobility (HUFSAM) got into a middle spot, advocating use of Trust Fund money for mass transit only if it involved buses; others—along with Congressional highway stalwarts—came out as expected, in flat opposition. Possible upshot: Congress could duck the issue by simply continuing the program as is for another two years.

As to efforts of architects and engineers to be exempted from bidding, it seemed likely that this move is dead for this year. A hearing conducted by Texas' Congressman Jack Brooks—longtime friend of the professionals in this matter who introduced one of the bills now before Congress—developed evidence of almost total opposition by the chairman of the Full House Committee on Government Operations (California's Chet Holifield), as well as from Comptroller General Elmer Staats (whose 1967 report kicked off the whole controversy) that indicated the move was dead.

And there were many other matters hanging fire, while Congress debated sex discrimination, Presidential appointees, and whether or not the inflation-control program is working or would work. (Incidentally, the walkout of AFL–CIO President George Meany and three of his cohorts from the Pay Board was being counted a political plus for the Administration: It not only provided a handy target for blame in the event of trouble, but it also left the Pay Board in a more workable, all-government appointed, condition.)

For instance: There were major bills introduced in attempts to solve the problem of siting power plants with due regard both to their effect on the environment and on the nation's undoubted need for more energy sources; bills to set up a three-year research program that could result in accurate advance prediction of earthquakes both as to time and location; bills to include a system of scenic highways (and also bikeways) in the federal-aid highway program; a major housing bill already passed by the Senate, still being subjected (as of early April) to the scalpel in the House. [E. E. Halmos]



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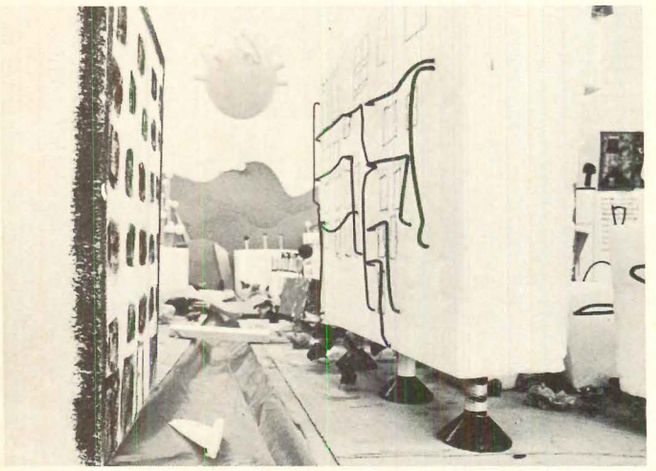
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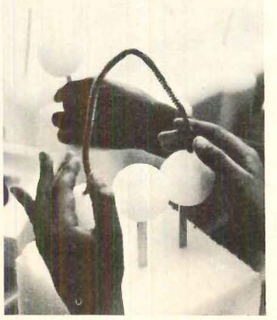
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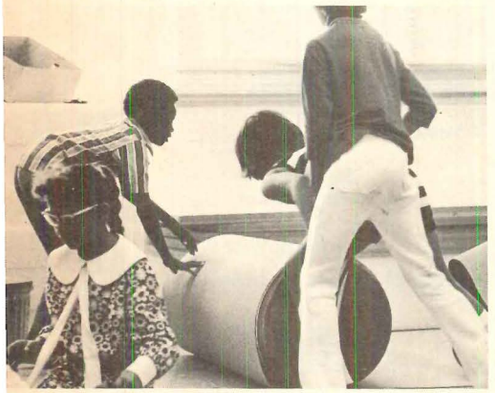
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Architecture west











Westminster students play the game

On the classroom floor was a mosaic of gray cardboard pieces cut in the shape of real parcels of land, and at the perimeter were street names—Santa Monica Blvd., Bundy Dr., etc. Twenty sixth-grade student at the Brockton Ave. School in West Los Angeles were playing the City Building Educational Program game.

An elected mayor and city council and their vocal constituents were attacking urban problems raised by their consultants, young architects from Ralph Knowles' Urban Design Studio at USC. At an earlier meeting they had laid out their community on the beach sand, and now Ty Miller ran the slides of their sand structures and gave crits. Four short rapid transit systems, a six-block long freeway, adjacent shopping centers were summed up: "Find out what your neighbors are doing."

In the afternoon the game was played by fifth- and sixth-grade students at Westminster School in the ghetto of Venice, and the morning before at the Warner Ave. School in middle class Westwood. The game is directed by Doreen Nelson, former Westminster teacher, and the two-year-old experimental program is funded by the National Endowment for the Arts.

Architect Frank Gehry started the game while exposing ghetto children to architecture at the Junior Arts Center at Barnsdall Park. "I tried to show them how visual people think, then led them into real life situations, like a freeway coming through a residential district. They learned to play a role in meeting urban problems. It wasn't beyond them. They didn't have to sit and wait for an expert."

Gehry's most fiendish and imaginative game is one called Purium; it sprang into his head at the Smithsonian when he and his sister Doreen Nelson were conducting six summer classes, and is now standard in her experimental program. The discovery of purium in the town increases the population 100,000 overnight. The children sacrifice dreams of "sing fam dwels" with a swimming pool in the back yard and always join together to protect the environment.

Gehry and his associate Jerry Kotas are consultants at the Westminster School. "It excites me to see a withdrawn child in a black ghetto school suddenly turned on," he said. "I watched one with an I.Q. of 65 begin to grow when she played the game. I feel there is little chance of politicians changing and the only hope for the cities is to raise the level of sophistication of grade school students."

Gil Stayner, who like other architects donates his time said, "Architects sit around classrooms too long. It's good to get out where we can't depend on shop jargon. When you have to put everything simply it brings you back to the essentials." Allen Gatzke teams up with Stayner on the Warner School project, which he called truly interdisciplinary. "It impinges on history, civics, art, math—almost all their subjects. One thing put us at a disadvantage—we didn't know New Math."

"The children had a hard time with scale, but one thing that helped them was seeing the Claes Oldenburg show," said Don Spiess. After that, one class designed a banana split school and another an ice cream soda school with flexistraw tunnels to an indoor park—"for rainy days."

Mrs. Nelson says that ghetto children fantasize more readily than middle class ones, but are quicker to batten down their structures when told a big rain is coming. "They all identify styles quickly and after seeing the Greenes' Gamble house spotted the bungalow style easily. [Esther McCoy]

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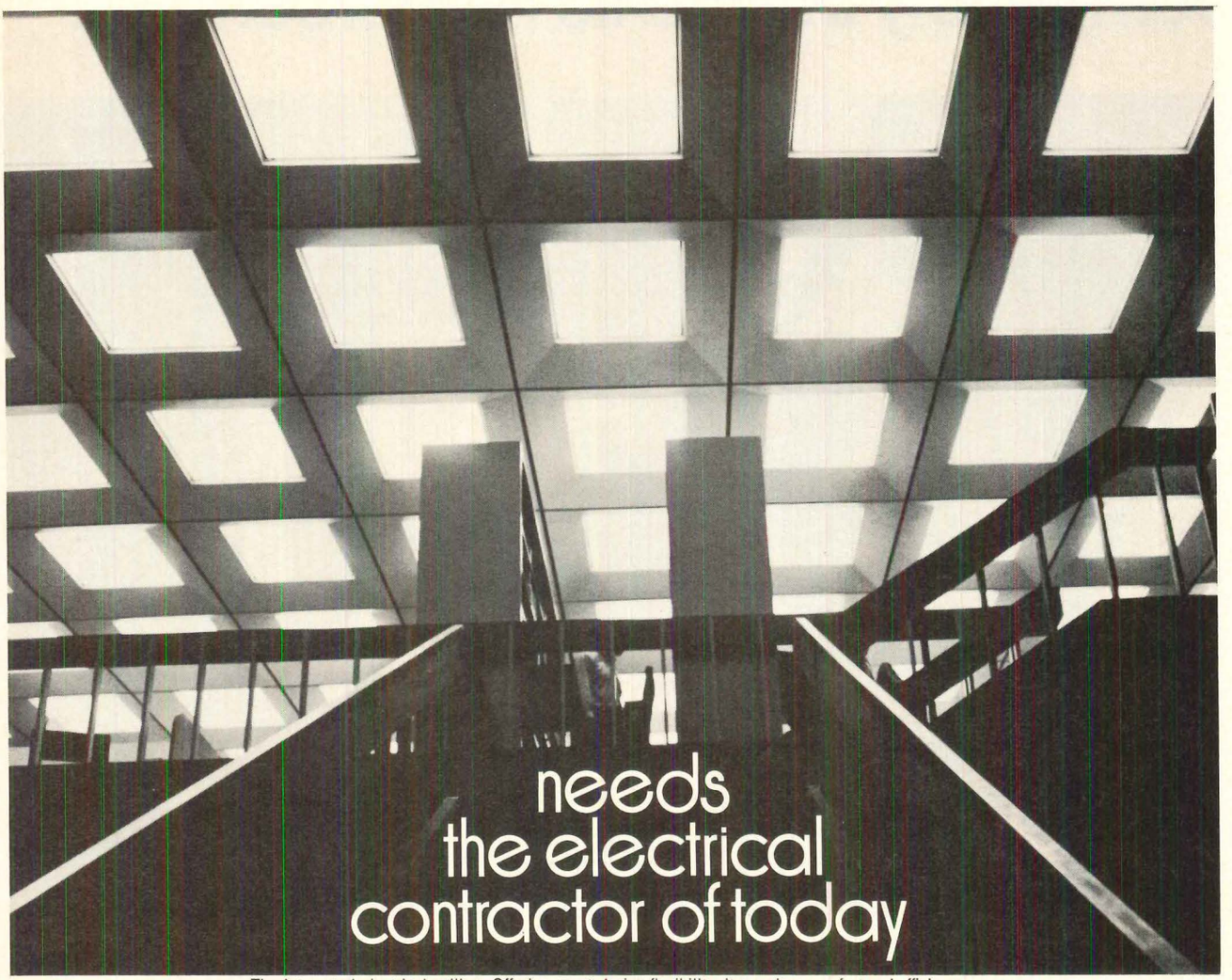
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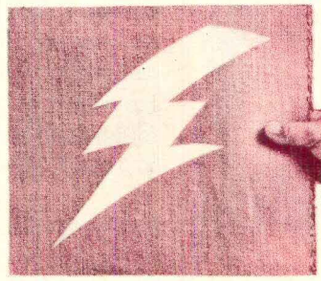
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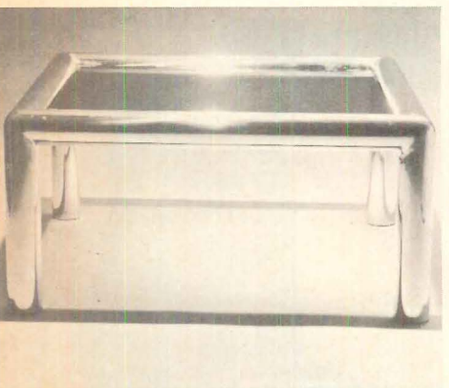
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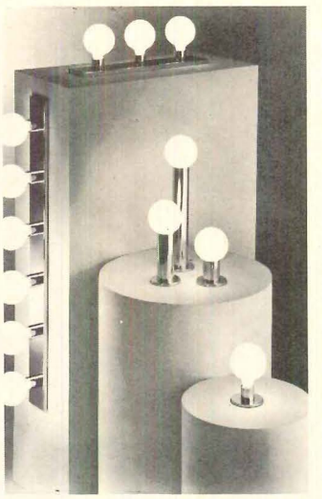
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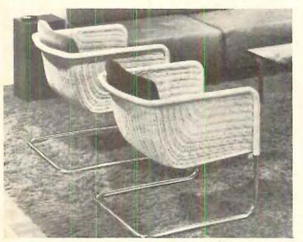
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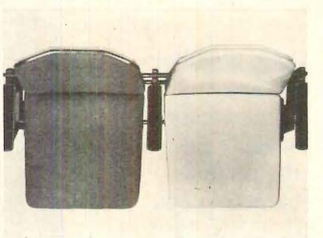
Museum piece



Balls of light



Wicker, suede and chrome



Auditorium seating system



For open-plan schools



Murals and supergraphics

Museum piece. John Mascheroni's tube table, accepted as part of the permanent collection of the Museum of Modern Art, is now being offered at contract prices due to new engineering facilities. Made of heavy wall virgin aluminum tubing polished to a high luster, with ½-in.-thick solar bronze glass tops, the tables are available in square and rectangular sizes. The tube design is used in the Etagere as well as lounge chairs. Vecta Contract Co.
Circle 101 on reader service card

Balls of light. One group from a collection of lighting fixtures for commercial and institutional interiors. Featured is polished chrome used to mirror reflect each ball of light; a modular close-to-ceiling design that creates, according to the designers, a "carpet of light"; a multidimensional supergraphic bullseye design for wall or ceiling mounting; a group of bare bulb units that offers a space expansion effect. Lightolier.
Circle 102 on reader service card

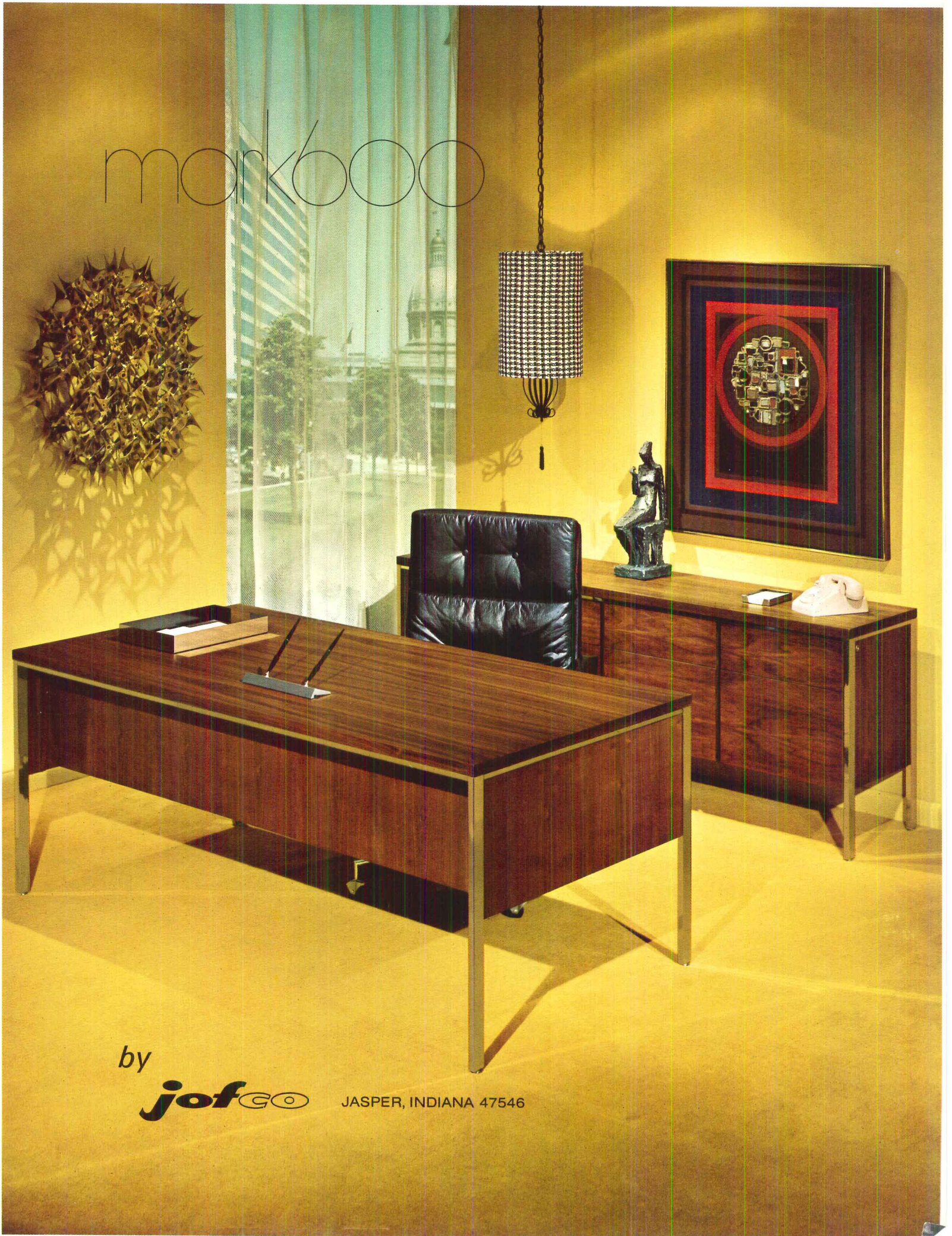
Contract carpet. Made of Du Pont's Antron II, a nylon with light reflecting qualities in the fiber configuration designed to make soil and dirt less visible, this carpet, called Sebego, has Brunslon added for static control. Three-ply pile yarns with the antistatic threads are dyed before tufting for a variety of color blends. Philadelphia Carpet Co.
Circle 103 on reader service card

Wicker, suede and chrome. In the Bauhaus tradition, this chair by Hans Konecke, imported from Germany combines natural handwoven wicker for the cantilevered shell, natural suede for the foam rubber seat and back pillow and a chrome spring-steel base. Harvey Probber Inc.
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Auditorium seating system. Designed to meet changing needs, this seating is available in four specifications: with all-plastic seat and back; upholstered seat and plastic back; upholstered seat and back; addition of a 140-sq-in. plastic folding tablet arm. These variations need not be determined when purchased, but are available over the life of the chair. Gravity-lift seat rises automatically; seat and back are blow-moulded high-impact plastic in eight colors. American Seating Co.
Circle 105 on reader service card

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Murals and supergraphics for wallpaper. Handprinted designs on vinyls and foils make up Kaleidoscope wallpaper collection. In some cases designs are more than 9 ft high, with first and last strips joinable. The pattern called Kaleidoscope comes in four colorways and consists of six panels, each 28 in. wide and 12 ft high, covering 14 ft of wallspace. James Seeman Studios, Inc.
Circle 107 on reader service card
[continued on page 63]


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NA-3001

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Products continued from page 58

Cushioned contract flooring. Quiet Zone is a cushioned sheet floor designed to reduce noise and offer comfort features; a specially engineered backing of ⅛-in.-thick foamed vinyl lessens sound and reportedly offers excellent resilience. Recommended for commercial and institutional interiors, the inlaid vinyl surface is designed to take heavy traffic conditions. Overall flooring thickness is .170 in. and is recommended for installation over concrete and terrazzo as well as suspended subfloors of plywood, double-strip wood, hardboard and metal. Flame spread rating is 75 or less (ASTM E-84). Offered in a classic houndstooth check in six colors. Armstrong Cork Co.
Circle 108 on reader service card

Fail-proof faucets. A ceramic water control mechanism that resists the wear generally associated with sand, silt, grease and other impurities that cause normal fittings to eventually fail is featured in these fittings. The cartridge uses two specially formulated ceramic discs, reportedly so hard they'll last a lifetime under normal conditions. Single water control handle, indexed for temperature control, for kitchen, lavatory and bath-shower use. American Standard Inc.
Circle 109 on reader service card

Desks on the metric system. Designed to offer maximum office planning flexibility, a basic desk and credenza can be varied 120 ways. Called the Metric Line, specifications are written in metric as well as standard linear measurements in preparation for the furniture industry's eventual conversion to the metric system. In white oak or American black walnut. The Gunlocke Co., Inc.
Circle 110 on reader service card

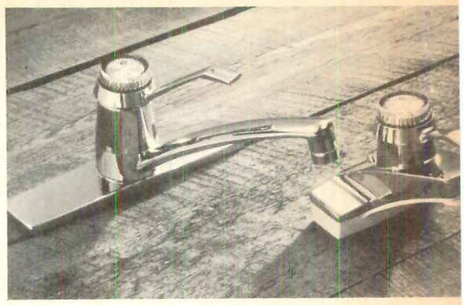
Copper Sovent plumbing wall. Latest development in Sovent plumbing is this self-aerating one-stack drainage system. Suitable for use in low- and high-rise buildings, the copper plumbing wall consists of a 3-in. copper Sovent aerator unit, a 3-in. copper DWV soil and vent stack and 2-in. horizontal waste branches to serve lavatories and tubs. The capacity of the 3-in. Sovent stack is 106 drainage fixture units or 8 bathrooms either single or back to back. Design includes provision for connecting water closets directly into the aerator fitting, plus copper tubing for hot and cold water distribution to tubs and lavatories. Copper Development Association Inc.
Circle 111 on reader service card

Literature

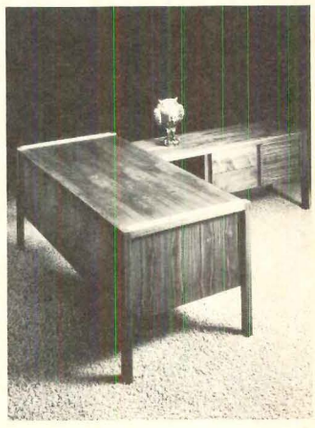
Sand-finished siding in colors. Structural siding panels called Sand-A-Sote are surfaced with a coat of silica sand in tan, white, other colors on special order. The sand finish is integrated with a hard-wearing, 25- to 30-mil-thick, ultraviolet-stable polyester resin matrix, the siding is extra rigid, weatherproof and described as twice as strong and rigid as their regular Homasote insulation board. Panels come ½ in. thick in 4′x8′, 10′ or 12′ sizes. Other sizes available. Homasote Co.
Circle 112 on reader service card



Cushioned contract flooring



Fail-proof faucets



Desk on the metric system

Composite floor and roof. A steel truss tee, a fiberboard form that remains in place, temperature reinforcing mesh and cast in place concrete are the components of this floor and roof construction system described as low-cost and easily installed and embracing fire resistance and acoustical qualities. Using 3500 psi concrete, the design criteria result in an integrated concrete section suitable for a 40 lb live load at 24 ft simple span. The load rating may be increased where continuous span conditions exist. Keystone Steel & Wire.
Circle 113 on reader service card

Parking decks. This method of construction for parking structures offer a clear span system, eliminating the hazard and nuisance of concrete and steel columns. It uses precast and prestressed concrete units that can be assembled in numerous combinations to create demountable or permanent multilevel parking facilities. The modular components can be used repetitively, are said to be easily and quickly erected, are fire and water resistant. Spanpark Corp.
Circle 114 on reader service card

Seamless flooring. Marathon is a nonporous seamless flooring that reportedly is abrasion and humidity resistant with a high initial gloss that should not dull with time. Recommended for hospital, school, industrial, commercial and residential use, the flooring is installed by broadcasting thin, colored plastic chips into a wet base. The floor is sanded to desired smoothness and a clear top coat is applied that forms a hard, resilient plastic film. In a class I flame spread category, with tests proving excellent resistance to solvents and chemicals. United Paint Manufacturing Co.
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Wade makes any carrier you can specify.

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Wade stocks residential and commercial carriers for all cast iron DWV systems. And for plastic, copper, and lead as well.

You can specify from Wade's exclusive new line of No-Hub carrier fittings.

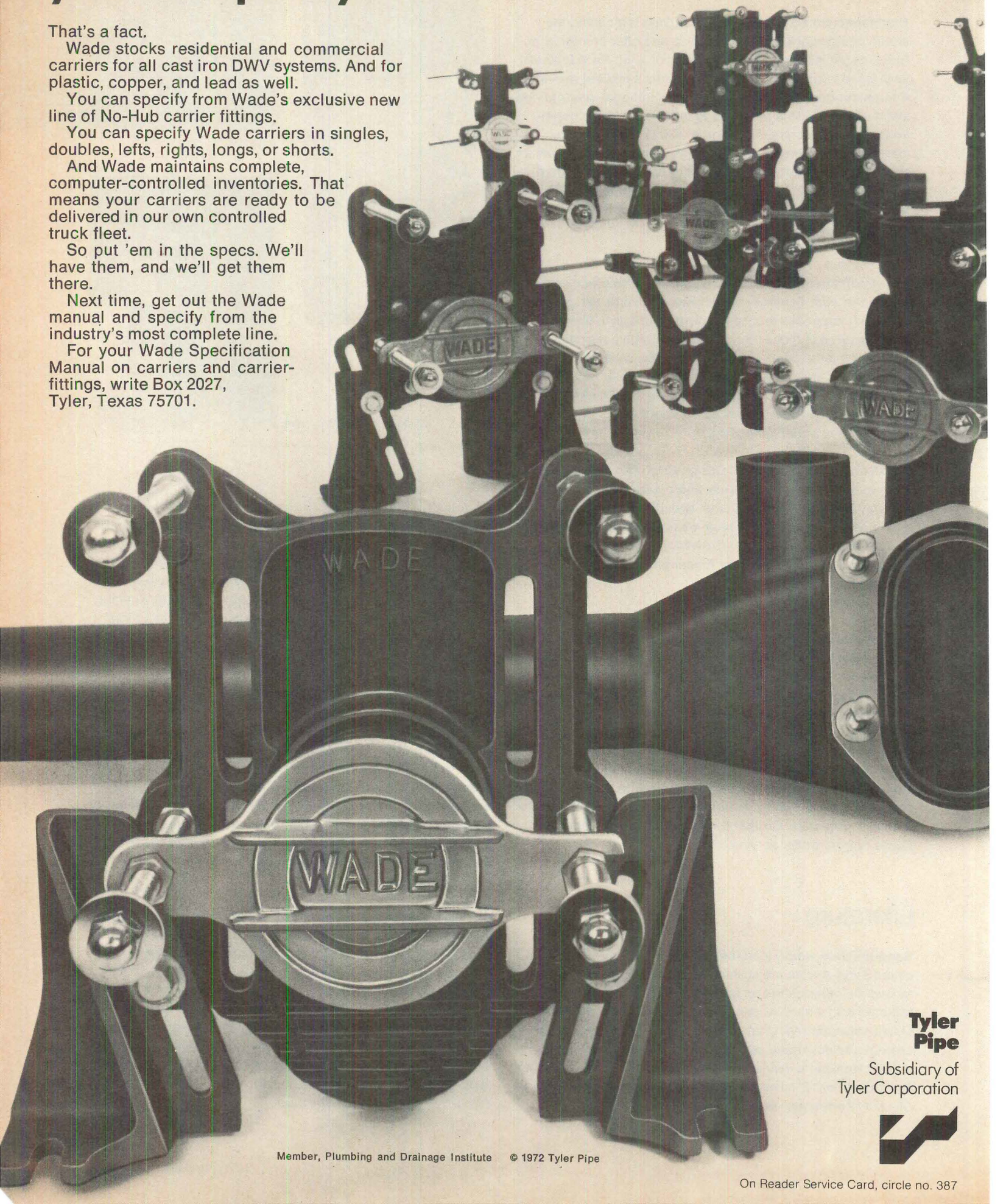
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Customed FACTORY FLOORS by Jennison-Wright

There's nothing ordinary about Kreolite® Wood Block factory floors! . . . In fact, they're very special and they deserve your special consideration. For instance: They have so many advantages over other types of floors (see panel at right), that we strongly recommend custom designing so that no feature will be overlooked. Therefore, when you choose Jennison-Wright End Grain Wood Block factory floors, be sure that they are given pre-installation planning so that they'll perform as they should. Our design engineers will expertly perform this service—at no charge, of course.

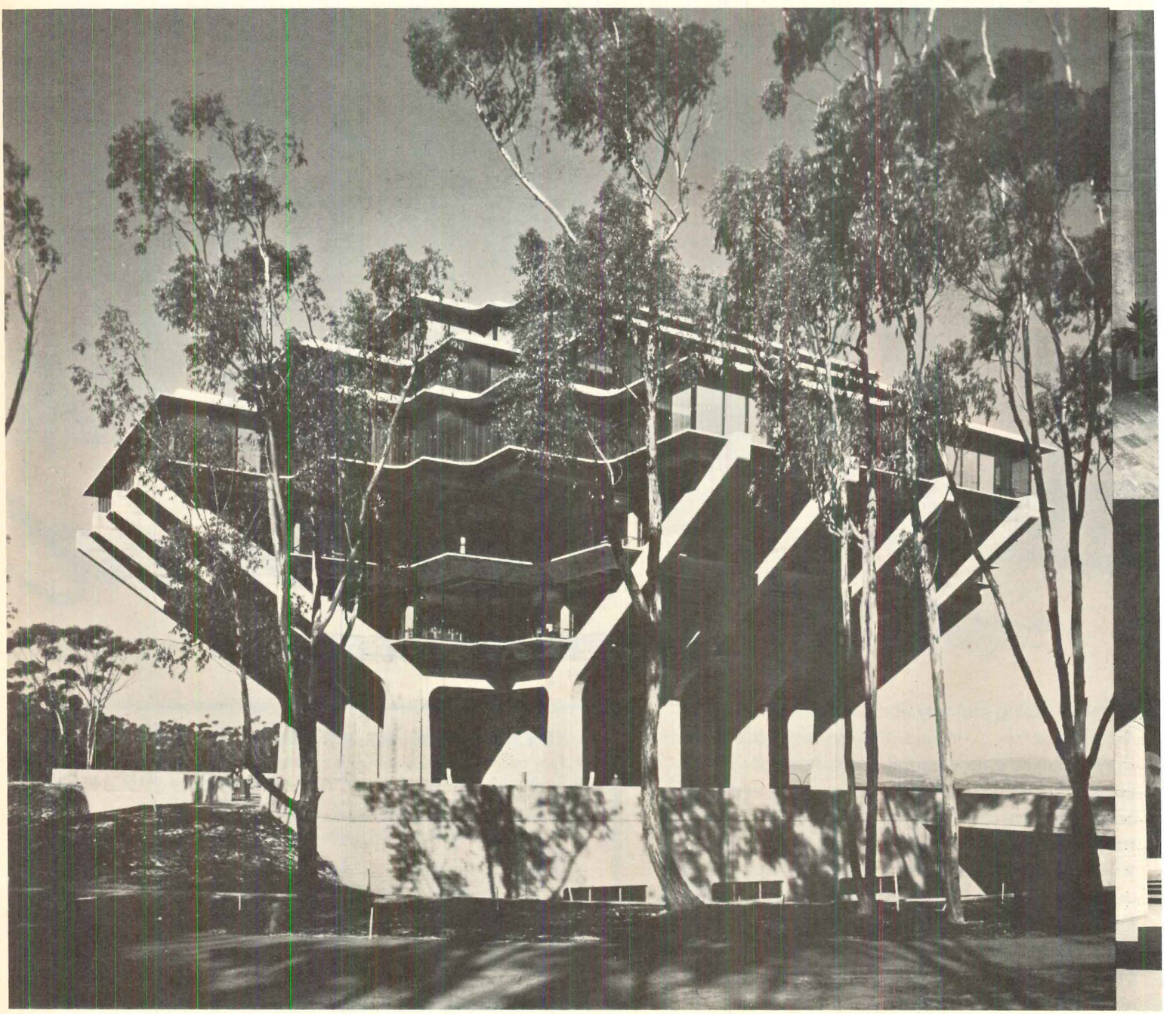
ADVANTAGES OF KREOLITE® FLOORS:

1. Easy relocation and concealment of service lines to machinery.
2. Speed and economy of replacement in aisles and other heavy wear areas.
3. Special finishes for absolutely dust-free surfaces.
4. Versatility in providing for in-floor conveyor systems, towlines, etc.
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6. Easy installation of oil dispersal and/or recovery systems.
7. Traditional properties of comfort through insulation.
8. Non-sparking surface in volatile areas.
9. Reduction of damage to dropped tools and products.
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JENNISON-WRIGHT

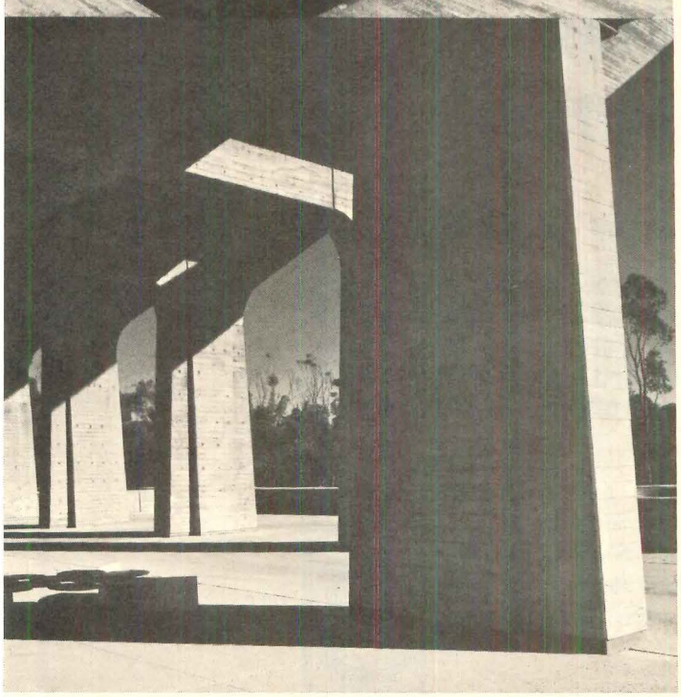
The Jennison-Wright Corp., P. O. Box 691, Toledo, Ohio 43694 . . . *you'll find us in Sweet's Catalog and in the Yellow Pages*

There's a new flair to learning in a library built of concrete with POZZOLITH admixture.



Owner: University of California at San Diego. Architect: William L. Pereira & Associates. Engineer: Brandow & Johnston Associates. General Contractor: Nielsen Construction Co. Ready Mixed Concrete with POZZOLITH Admixture: Pre-Mixed Concrete Co., Inc.





The new library on the campus of the University of California at San Diego bears a striking resemblance to a contemporary pagoda. From a solid, compact base, its profile cantilevers outward to the fourth-floor level, then recedes to the roof line. The unique design will accommodate future seventh and eighth floors when expansion becomes necessary.

Around the first-floor perimeter, flying buttresses flare into slender diagonal beams which provide structural support to the overhang.

Originally conceived as a steel frame structure, the desire for construction economy led to the choice of exposed cast-in-place concrete with formboard finish and post-tensioned structural members.

Because of the need for predictable concrete performance, *POZZOLITH* polymer-type admixture was used in the building's 17,000 cubic yards of concrete. *POZZOLITH* helped provide greater workability and placeability, prevent unwanted cold joints, and improve consolidation around reinforcing members. It also minimized cracking.

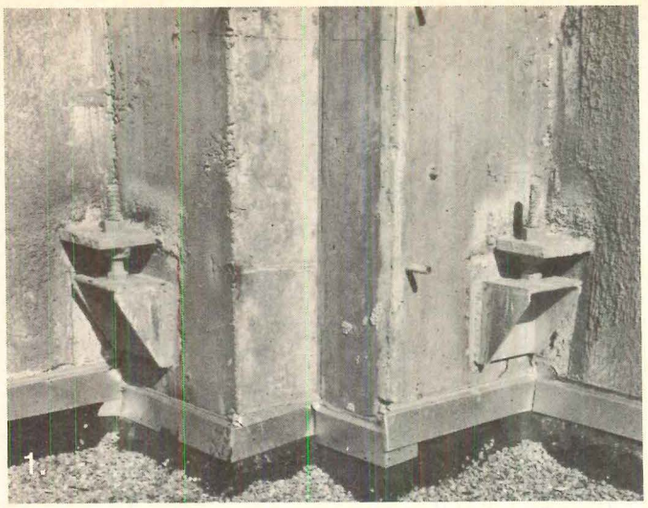
From an appearance standpoint, *POZZOLITH* enhanced the reproduction of the formboard texture and eliminated the need for additional finishing.

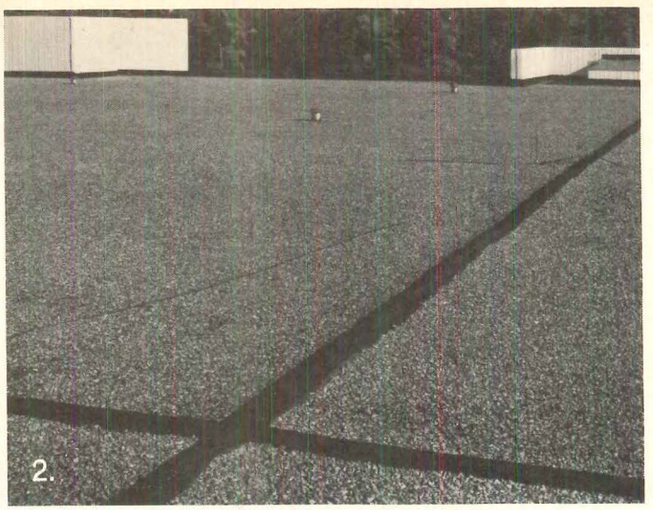
You'll find *POZZOLITH* the preferred admixture whenever concrete performance is vital. That's because *POZZOLITH* delivers its many performance benefits where performance counts—on the job and in the finished structure. That's why, over the years, *POZZOLITH* has earned the name "The Performance Admixture."

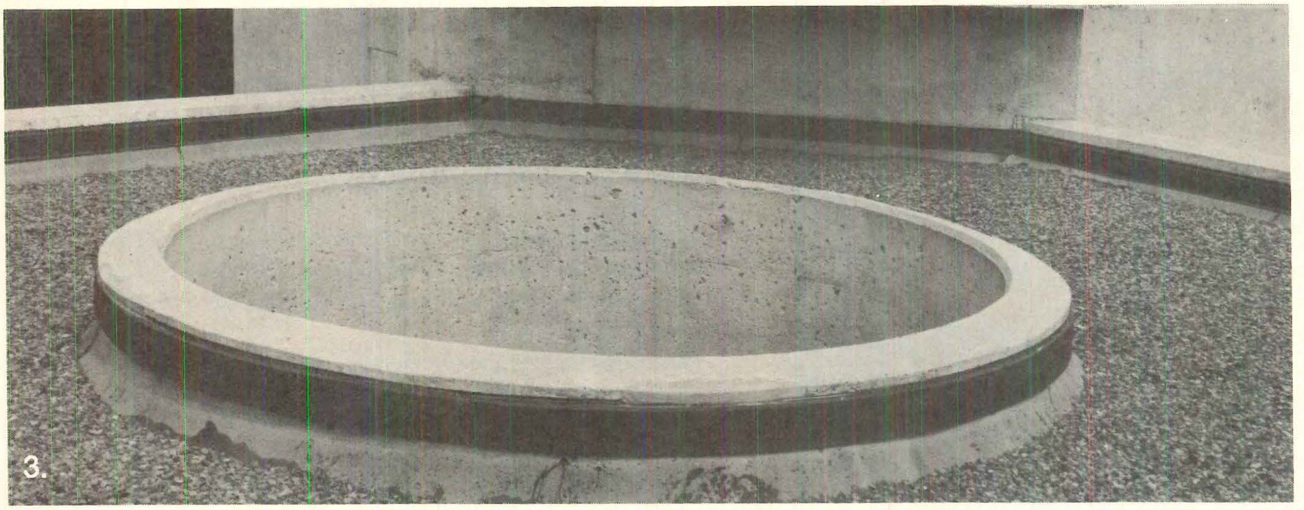
The concrete in your next job will be predictably better with *POZZOLITH* in the mix. For detailed product information, call your local Master Builders field man, or write Master Builders, Cleveland, Ohio 44118.

POZZOLITH* manufactured by **MASTER BUILDERS**

*POZZOLITH is a registered trademark for MASTER BUILDERS' water-reducing, set-controlling admixture for concrete.







1. Cullen Center Bank Building, Houston
   Architect: Neuhaus + Taylor, Houston
2. Houston Brookhollow Complex
   Architect: The Office of G. Pierce • Goodwin • Flanagan • AIA • Houston
3. New Alley Theatre, Houston
   Architect: Ulrich Franzen and Associates, New York

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Tricky joints in roof designs are no problem when you use Gacoflex Contourflash.

Contourflash is a specially formulated elastomeric sheet material designed for use in all flashing applications. With it, you can stop flashing failures at roofing terminations, parapets, curbs, and penetration and expansion joints. Contourflash is self-curing. It is easily and permanently adhered to concrete, wood and metal surfaces, regular and irregular in shape. Versatile Contourflash can be hot mopped into conventional roofs and stripped in with hot asphalt.

The natural elasticity of Contourflash allows expansion and contraction with the substrate and it remains flexible from —40°F to +220°Fahrenheit without getting soft or brittle. Gacoflex Contourflash is in use in buildings all over the country —commercial, monumental, and institutional. For details and specifications —check Sweets, Section 7.10/Ga. Or, write for the Contourflash bulletin.

GACO

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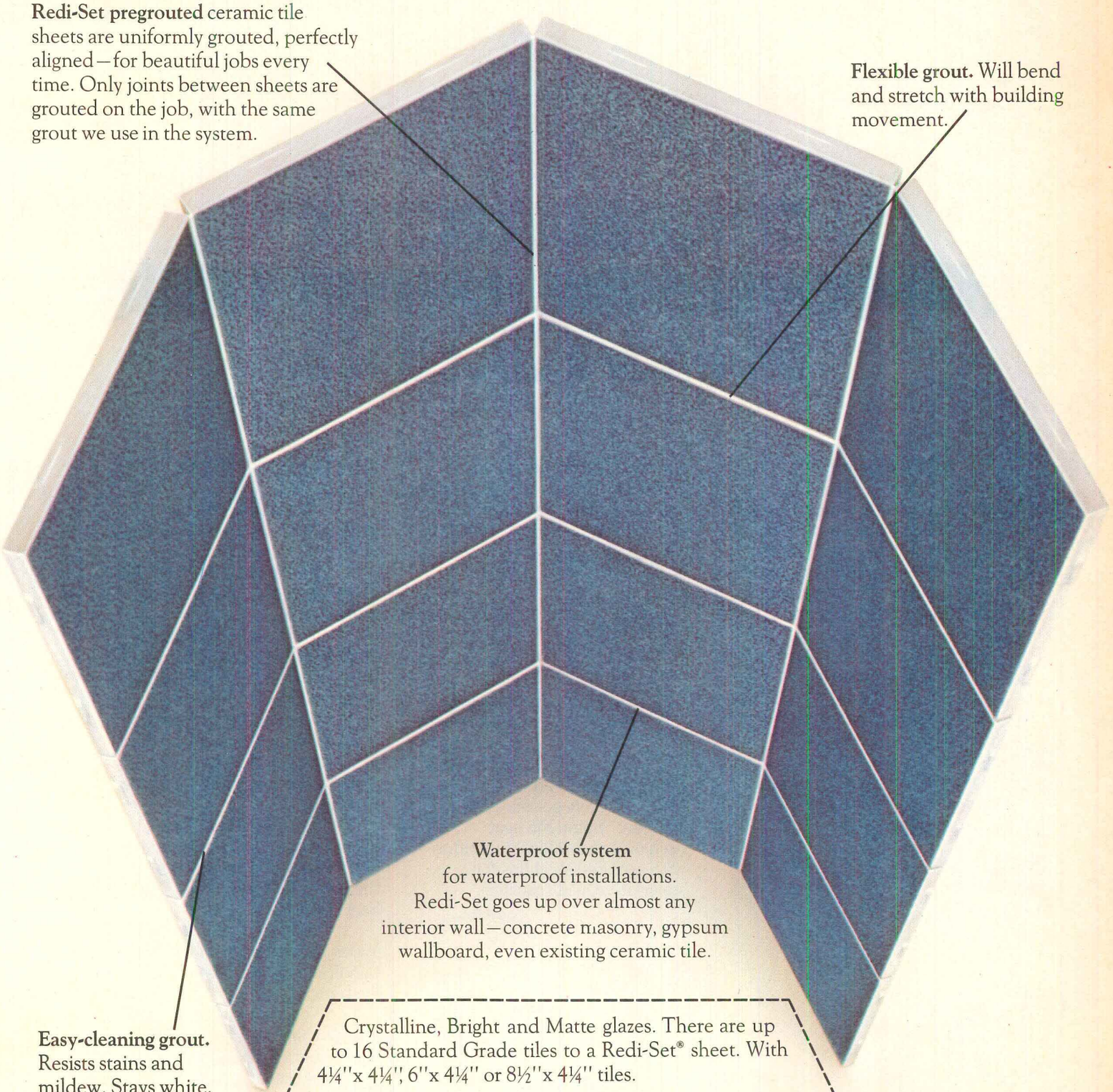
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Redi-Set pregrouted ceramic tile sheets are uniformly grouted, perfectly aligned—for beautiful jobs every time. Only joints between sheets are grouted on the job, with the same grout we use in the system.

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Redi-Set pregrouted tile. It's the natural thing to use.™

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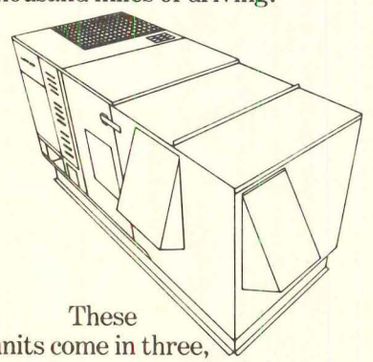
GENERAL ELECTRIC INTRODUCES THE NEWEST THING IN GAS/ELECTRICS.

We took a leaf from the auto industry's book to bring you a new line of roof-top gas/electrics with an ignition system that is virtually immune to the weather.

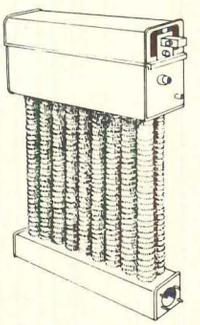
These units will never be "down" because of a blown-out standing pilot light. Because they don't have a standing pilot light.

What they do have is the spark of a heavy-duty spark plug.

And this plug lasts. It fires four to six times per start, which in twenty years would be only about as much use as the spark plug in your car gets in several thousand miles of driving.

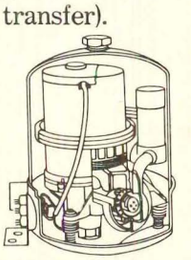


These units come in three, four, five, seven-and-a-half, and ten ton sizes. This gives you great flexibility for installation where you want gas heating and electric cooling in one compact package.



Of course, our new gas/electrics have lots more going for them than the spark plug ignition system.

They've got our new Multiloy™ Spine Fin heat exchanger (stainless steel tubes with serrated steel fins for superlative heat transfer).



They've got GE's famous Climatuff™ compressor— with a remarkable record of reliability in over 300,000 installations.

They've got flat-top design, roof-mounting frames and curbs.

They're approved by the National Roofing Contractors Association.

They can be had with a wide choice of accessories, so they can be used in the widest variety of applications.

And they're approved by the American Gas Association as well as certified by the Air-Conditioning & Refrigeration Institute.

We've got other gas/electrics from two to twenty tons, and with all of them you can have the General Electric National Service Contract Plan.

Look up your GE dealer in the Yellow Pages under "Air Conditioning Equipment and Systems."

Now that you've met the newest thing in gas/electrics, meet the man who'll give you the ones you'll need.

GENERAL ELECTRIC

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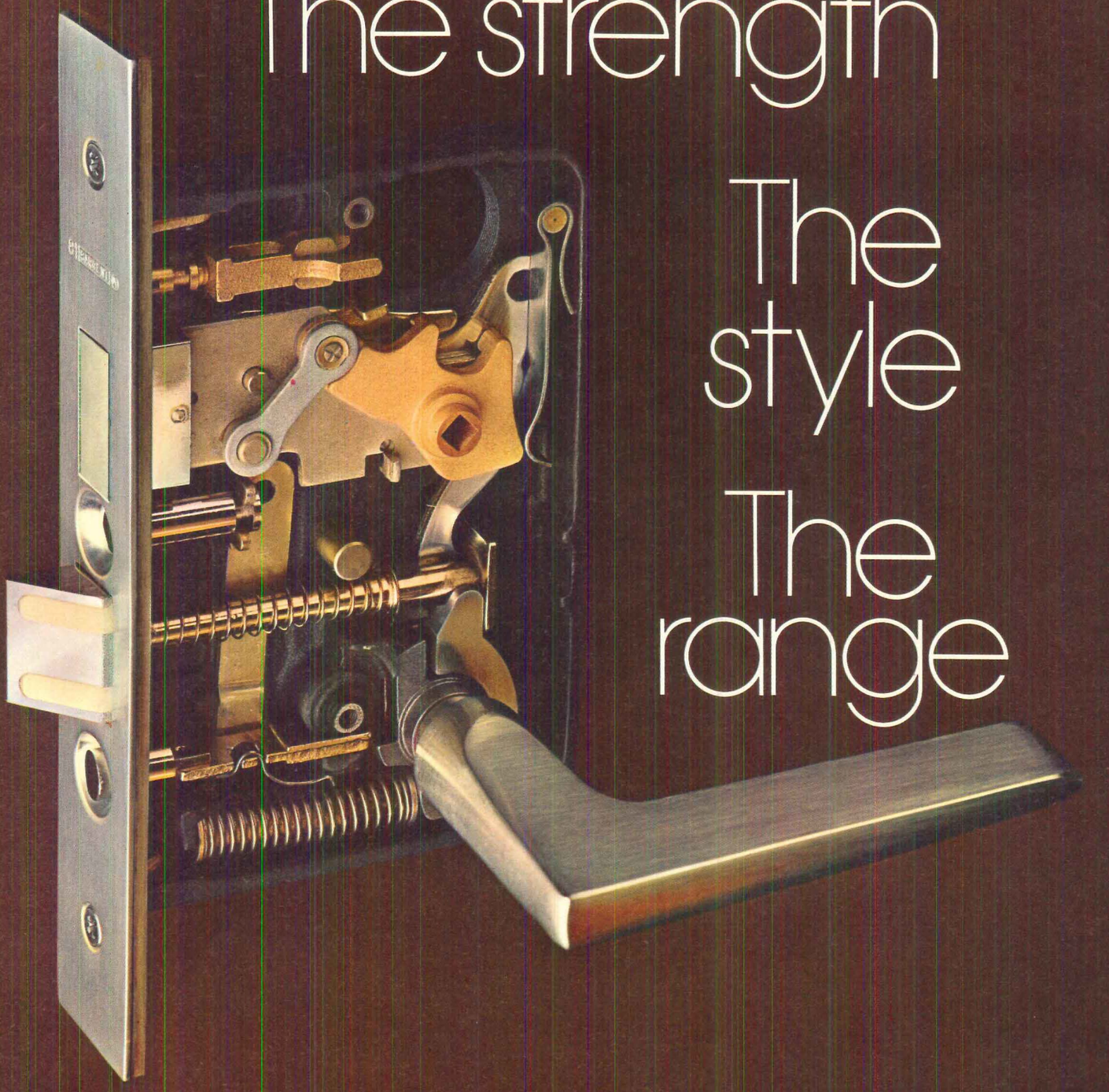

J-13Y

The looks, the lines of Sargent locksets speak for themselves. The high-styled trim, the handsome hardware finishes. □ Now look deeper for the inside Sargent quality. We give you the works that last . . . and out-last. □ And Sargent provides the range of locks and latches to accommodate any door requirement, in any value range. □ Sargent locks and latches . . . well worth another look.

The strength

The style

The range



SARGENT®

A complete line of advanced architectural hardware, including the Sargent Maximum Security System
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Progressive Architecture

May 1972



Does your house look just like the one next door? Not if you can help it. In our society, uniformity in housing has been the stigma of deprived groups, the residents of company towns, tenements, public housing and army posts—or of people on the lowest rung of home ownership. The first thing the more-than-minimal development offers is diversity.

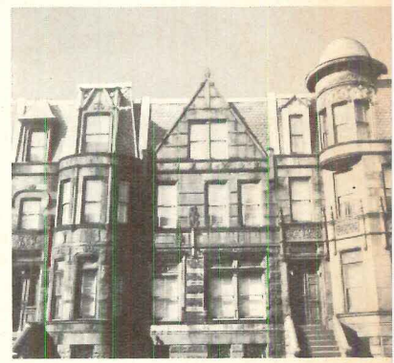
"A true departure from the mundane, this low slung Contemporary dares you to be different," tantalizes an ad in the *New York Times* Real Estate Section, whose pages are peppered with words like "unique" and "one-of-a-kind." If his houses come in rows, the developer has to overcome preconceptions: "People come to Stonegate expecting to see just another look-alike development." But their stereotype will be shattered by Stonegate's "apartment homes and townhouses," in a "choice of Alpine Swiss, Country French, Normandy French, English Tudor or Colonial American." (Plus the flavor of the week?)

Architects of the Modern Movement have reserved a special kind of scorn for superficial variation—for the interchangeable patches of fieldstone or brick on more pretentious suburban houses. We have savored the urbanity of uniform housing rows, from the Place Vendome, the Bath Crescent, and Louisburg Square to Mies' Lafayette Park and Pei's Society Hill. Variation has been welcome only if legitimized by internal variety, as in all those Mediterranean villages or in the rowhouses at Reston.

But the *occupants* of row housing are not so eager to sacrifice their individuality to the higher order of urban design. In America, consumers rebelled against uniform housing about 100 years ago. Restrained rows of Greek Revival and Anglo-Italianate townhouses were succeeded by rows with exuberant variation (examples above); no matter that the interior layouts were substantially identical. Even the older, regular rows were not immune to individualistic renovation: oriel windows and turreted attics sprouted here and there from once uniform fronts.

Present day rehabbers are no less tempted to do their own updated thing. If they don't have the means to replace the windows with Cinderella casements or Martian bubbles, they are likely to paint the brick or brownstone mauve—or maybe mustard-seed. One of the functions of the commissions overseeing historic districts in our cities is policing the painting of house fronts to check disruptive self-expression.





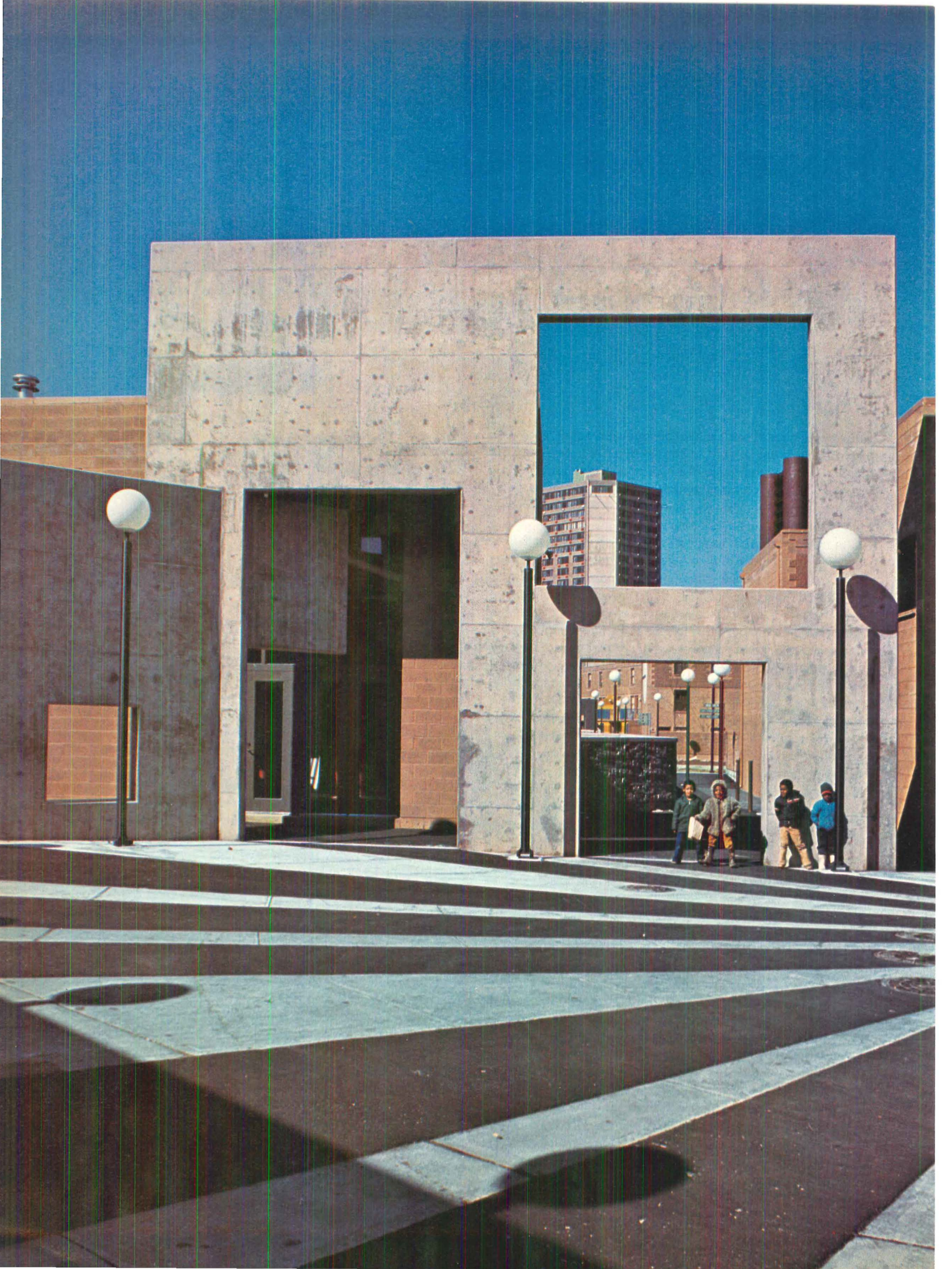
Rowhouse variations, Brooklyn, N.Y.

Now Charles Moore is challenging our righteous attitudes toward superficial variation. His housing at Church Street South (p. 74) has little "legitimate" variety in unit plans, but that has not inhibited him. He has shamelessly painted the house fronts in different color schemes for different rows, with a skin-deep arc here and an angle there to differentiate units within the rows. This is one of the most significant collections of "decorated boxes"—to use the overworked Venturi-ism—since the Gay Nineties. Even the venturous Mr. Moore, our writer explains, did not consider such cosmetic variation till he had to abandon a more restrained—and more conventional—scheme where variety had been achieved with contrasting textures and materials.

The designers of housing systems, confronting the specter of industrialized monotony, react by promising wide ranges of arbitrary variation—in wall color and texture, fenestration, etc. Toronto architects Diamond & Myers have been working on a factory-produced rowhouse scheme that takes a lesson from auto-makers by offering buyers their choice of exterior colors.

Whether or not they choose their own options, the occupants of repetitive housing undoubtedly crave individual identity. And they know that red or blue costs no more today than gray. We must either indoctrinate the public in the virtues of honest repetition or start learning from Charles Moore and the Victorian street scene.

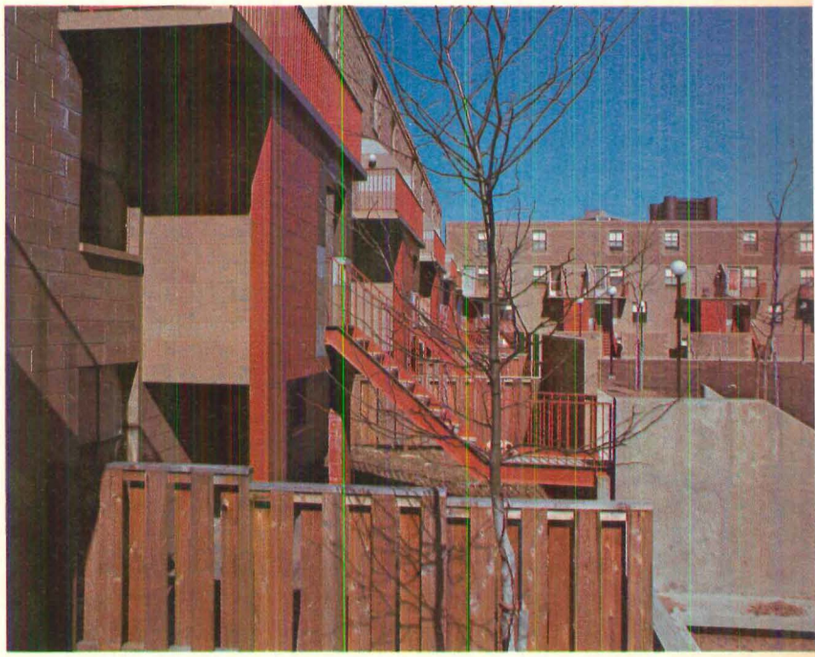
John Morris Dixon



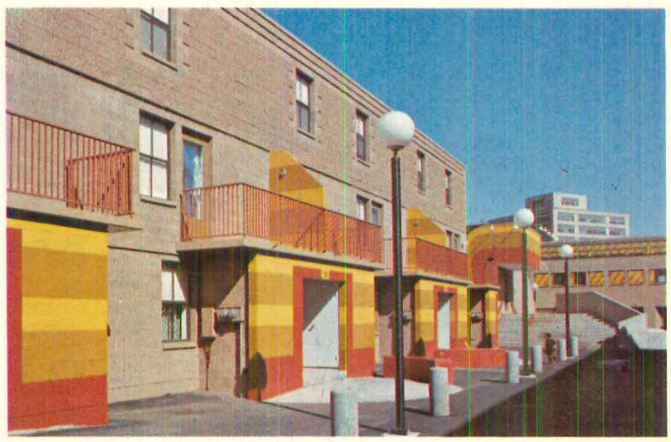
Low-moderate baroque

Although planning for the Church Street South site in New Haven began in 1910, what emerged in 1972 is not unlike the earlier proposal. Dealing with the same considerations of place and connection that the earlier plan did, Charles Moore has made the housing both a place of its own and a connection to the city as a whole

The parcel of land called Church Street South has been described by Charles Moore, architect of the project, as "nowhere between two somewheres"—the two somewheres being the once thriving New Haven Railroad and the Green at the center of town. For this same nonplace, where Moore's 709 units of low-moderate housing now stand, Frederick Law Olmsted and Cass Gilbert once envisioned a tree-lined boulevard with shops, cafes and hotels connecting the station with the Green. In their 1910 plan for New Haven, they felt that "the first impression of most . . . visitors will be gained upon emerging from the station . . . and upon this impression will be largely based the opinion of the city."







The forum (opposite) has day care center on one side and a housing court on the other with alternate wedges of asphalt and concrete paving radiating from a circular fountain. In the distance, the Knights of Columbus Office Building and the high-rise elderly housing project can be seen through the opening in the forum wall which continues the pedestrian walk. Housing is Christopher Green (above, top), Station Court (left) with blue and ochre façades, and Jose Marti Court (above) looking toward the commercial buildings on the pedestrian walk.

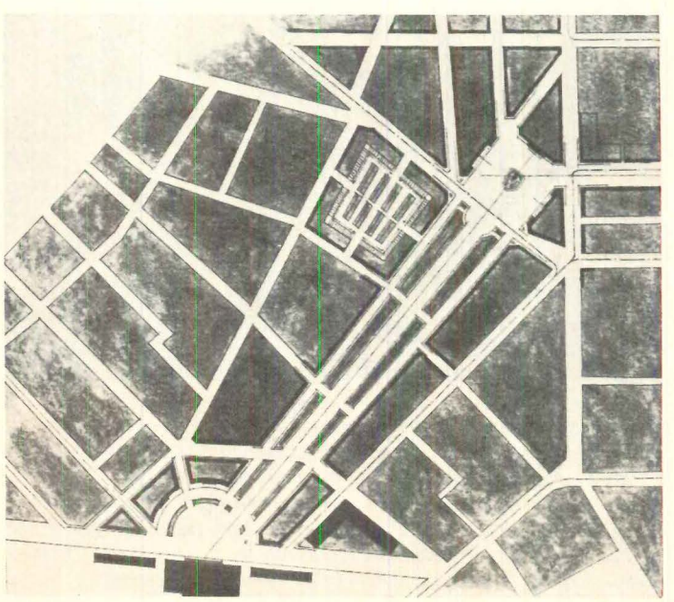
Low-moderate baroque

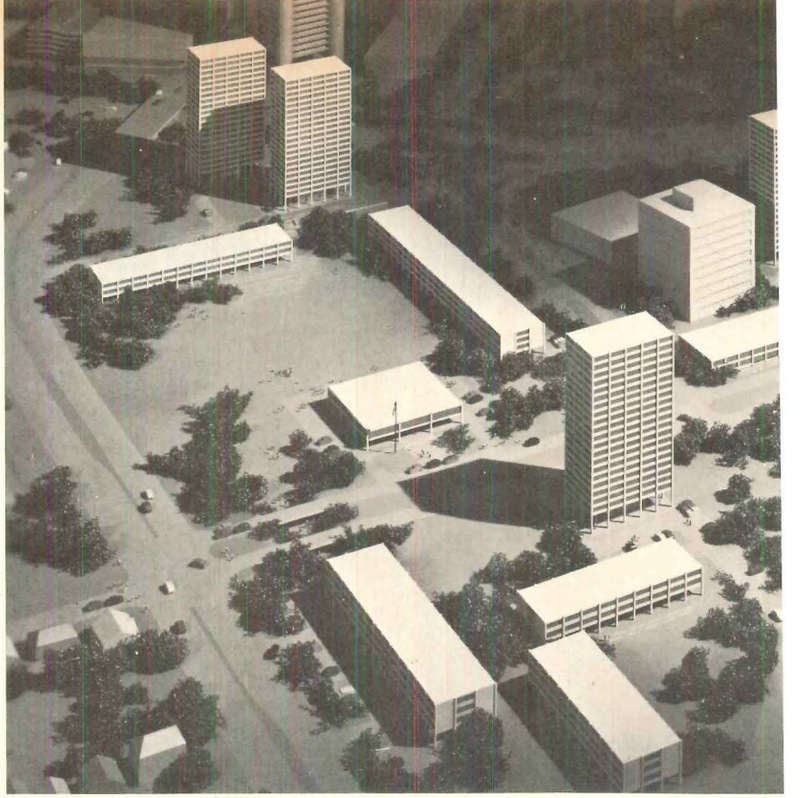
For those critics of the current housing there, the decline in the railroad and the growth of the automobile has shifted the "first impression" of their city to highways and garages. Though Church Street South occupies this no longer so prominent position, it is organized around a pedestrian spine with a variety of public spaces, shops and small offices paraphrasing the early work of Olmsted and Gilbert. The 400 low-rise units, sponsored by the Junior Chamber of Commerce, are laid out around this spine. Ninety public housing units for the elderly occupy a triangle of land adjacent to the low-rise and diagonally across from the station. The remaining 217 housing units for the elderly, sponsored by the Jewish Community Council, are in a high-rise tower on the axis of the spine, playing the role, Moore feels, of a poor relation to the nearby Knights of Columbus office tower.

The Olmsted and Gilbert plan, although it was both civically grand and logical, was only the first of several plans for the site that was never to be implemented. The wholesale markets which occupied the site in 1910 remained there through the early 1950s.

With the advent of Mayor Lee and Edward Logue, attention focused on the revitalization of the central business district, which led to the first real disaster to affect the Church Street South site—construction of the Oak Street Connector in 1956. Although the road may have made access to the CBD easier and at the same time cleared some substandard building, its right-of-way severed this site from the center of the city. To qualify for federal redevelopment funds at the time of the proposed CBD renewal, plans had to include a substantial percentage of housing; the Church Street South parcel containing approximately 1000 dwellings, of which 30 percent were judged to be substandard, was annexed to the center city renewal project.

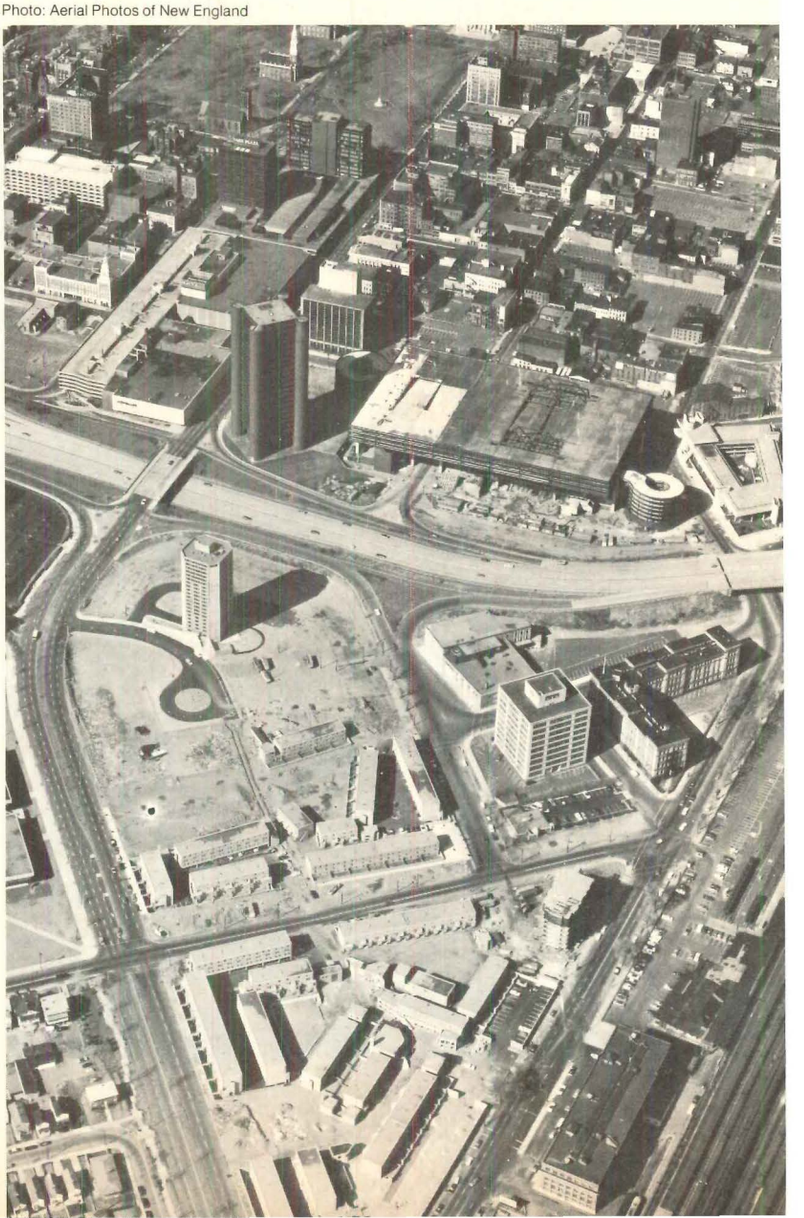
First plans in 1957 for this newly acquired land showed two housing towers and an extension of Church Street to the station. Light industry—called "commercial park"—was planned for the majority of the site as the city felt the land too valuable to be used for public housing. Fortunately, negotiations with

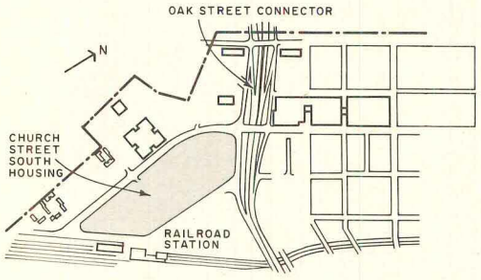




The Olmsted-Gilbert plan (left) shows the boulevard connecting the Railroad Station with a large civic square where the boulevard turns to lead on the green (not shown). Photo (top) is of Mies van der Rohe's scheme for the site and aerial photo (below, 1971) shows the site as built, the Oak Street Connector, Knights of Columbus and New Haven Green.

Photo: Aerial Photos of New England





SITE PLAN

Legend

1	Entrance to pedestrian walk
2	Jose Marti Court
3	Station Court
4	Forum
1-4	Commercial space along walk
5	Christopher Green
6	Cinque Green
7	Robert T. Wolfe Public Elderly Housing
8	Columbus Ave. and location of proposed bridge
9	Malcolm Court
10	Forum
11	Great Green
12	Little Green
13	Housing not built
14	High-rise tower for elderly

developers failed to produce any results, so thoughts turned to housing for the rest of the site. In 1965 Mies van der Rohe was commissioned to design 800 units of mixed-income housing and an elementary school. It seems that Mies and the developer could not come to terms over low-cost building, and the Corbusian site plan did not fit the renewal agency's concept of mixed income, intense site development with commercial facilities and structured parking. This disparity soon brought Mies' short acquaintance with the city to an end.

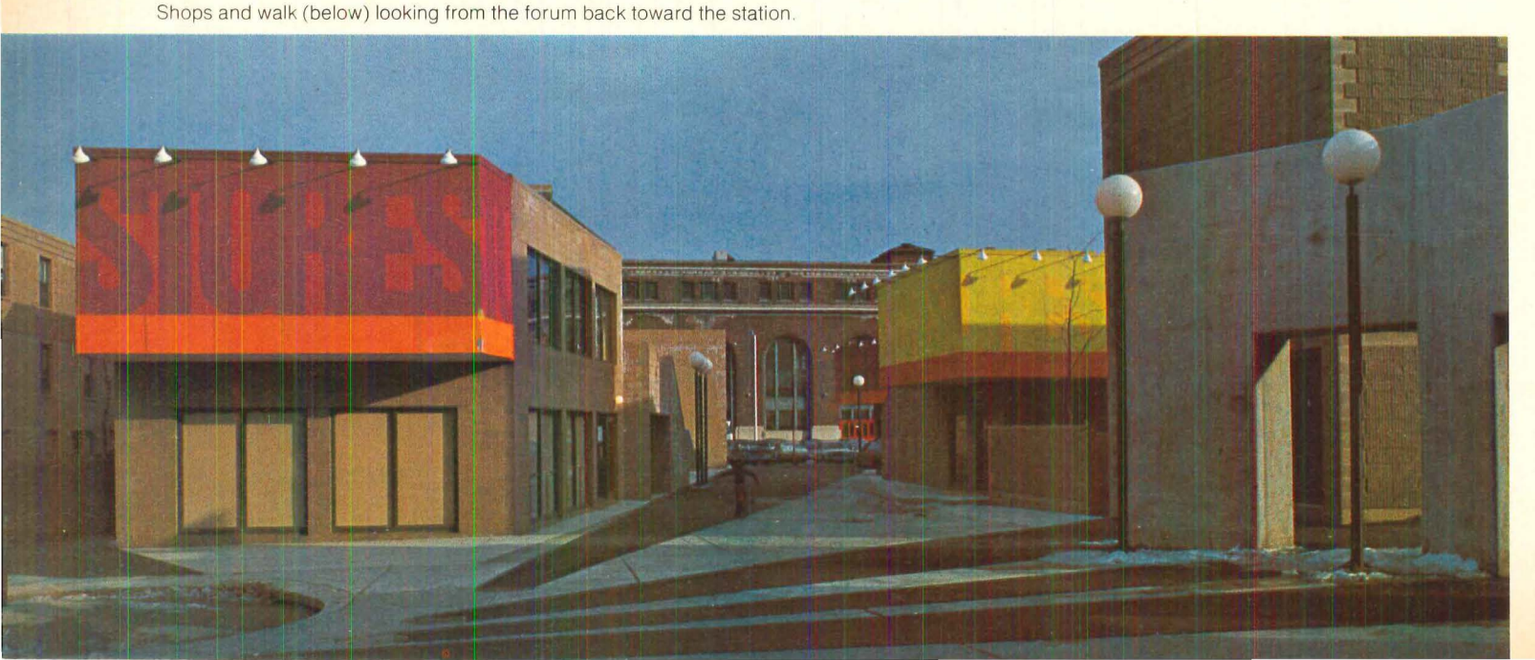
Mayor Lee then named Charles Moore, newly appointed dean of the School of Art and Architecture at Yale, as architect for the project. At that time, the scheme included 300 low-rise units for low-moderate housing financed at below market interest rates under Section 221 (d)(3) with the remaining 100 units reserved for middle-income families and financed at regular market interest. (These 100 units represented the idea of mixed income, but were subsequently converted to low-moderate when it became apparent that token amenities—colored bathroom fixtures and larger refrigerators—would not induce middle-income families to pay $100 more a month for essentially the same housing.)

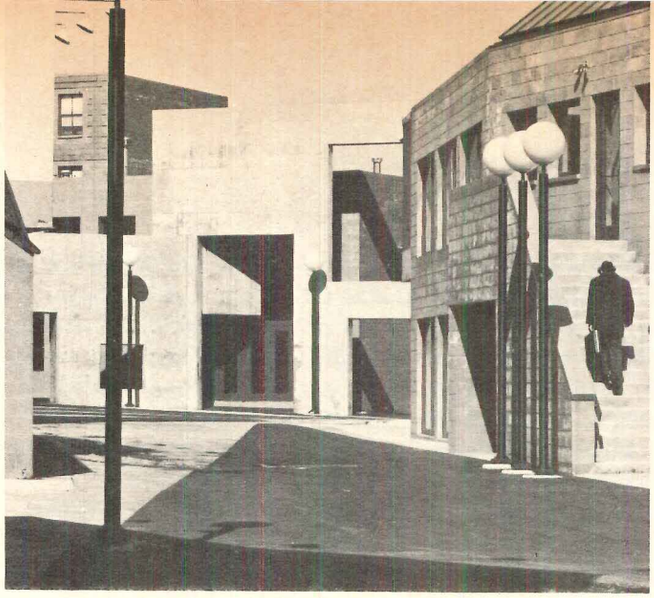
The selection of Moore as architect in no way assured the resolution of the complex process that had begun in 1910. Moore's first plans for the site accommodated the necessary parking for the 400 units in three large lots and showed a vehicular street connecting the station with a point close to the Knights of Columbus tower, even though the Church Street South Extension to the station had already been built. The ve-



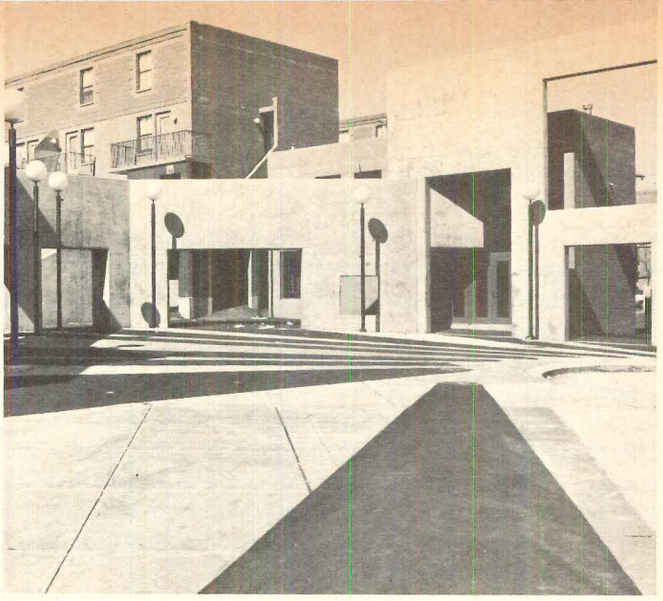
Beginning of the pedestrian walk (above) seen from the railroad station.

Shops and walk (below) looking from the forum back toward the station.



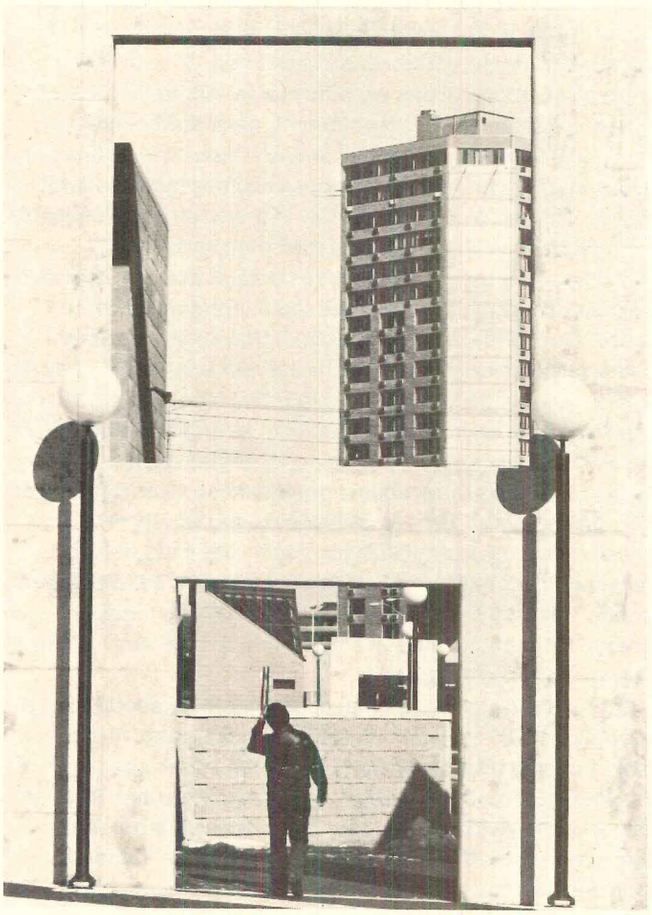


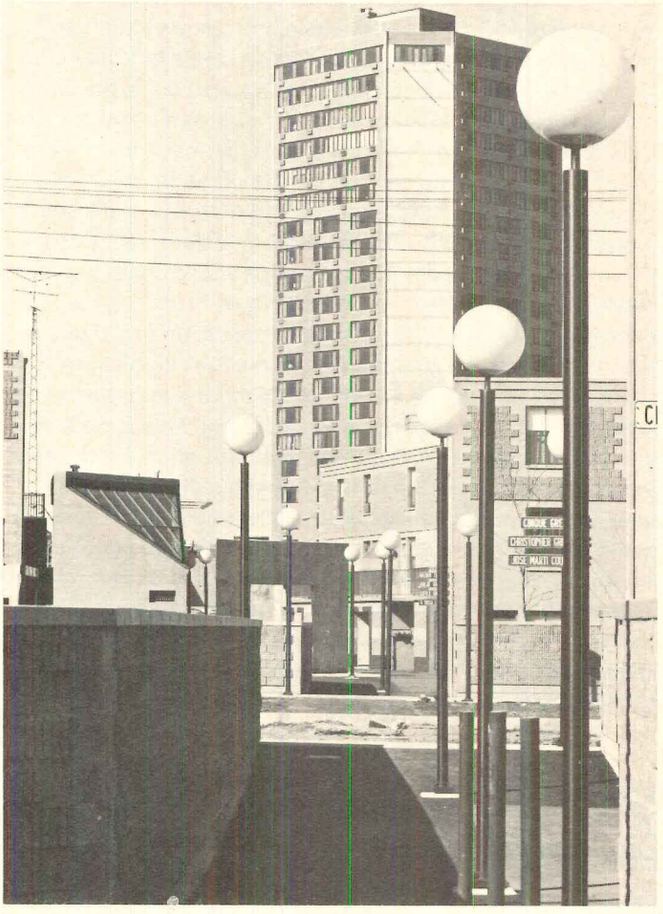
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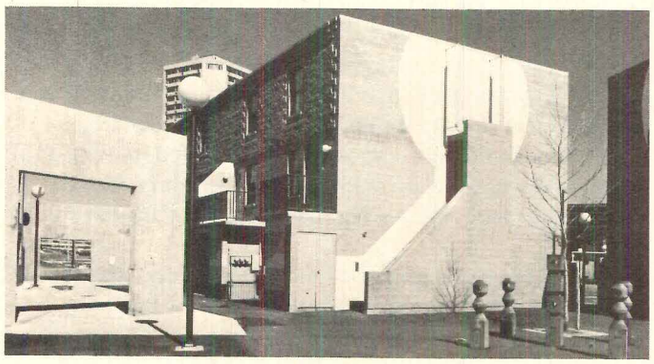
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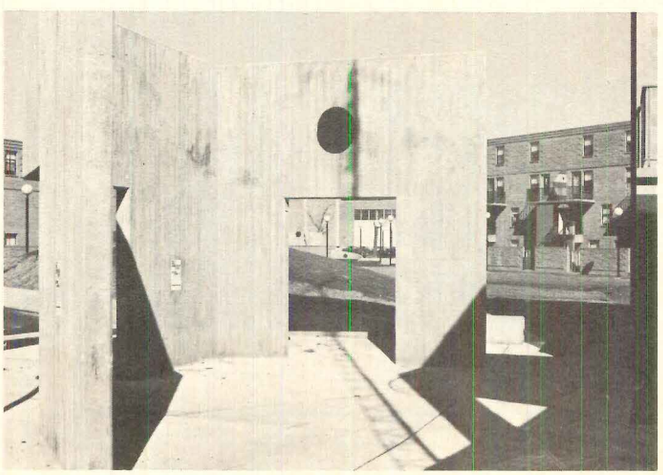




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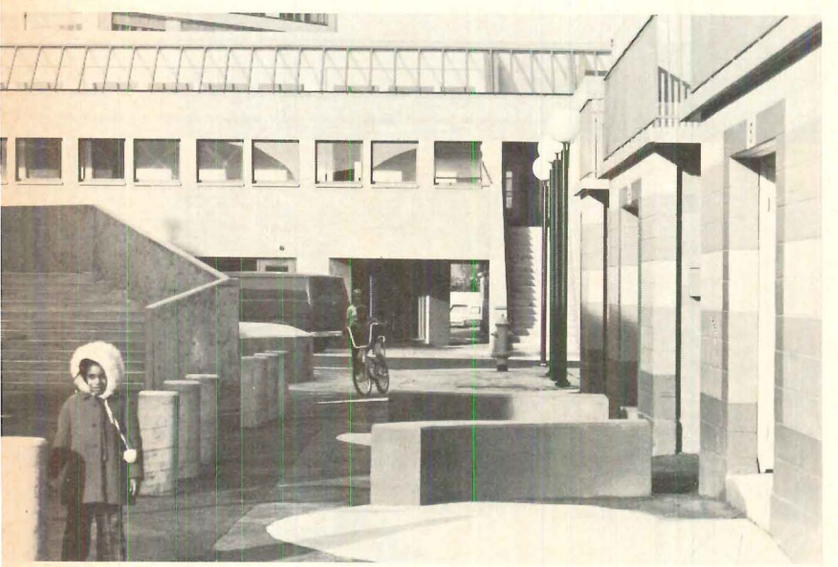
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Sequence from the pedestrian walk toward the forum (1), in the forum (2), through the arch (3), approaching Columbus Ave. (4). The walk now ends in another forum (5 and 6) but will continue when the project is finished.

hicular street in Moore's conception was to be "folksy and intimate," but the city engineer flatly stated that all city streets were 36 ft wide.

The inclusion of a vehicular street really bore on a much bigger, still unresolved, planning issue—that of the ring road around the CBD. In Moore's program, Columbus Ave., the only remaining street crossing the site, was slated to be a link in the four-lane ring. To avoid an additional intersection along the ring road, Moore's proposed vehicular street was converted to a pedestrian spine. Moore, then proposed a pedestrian bridge over Columbus Ave. to line.

The fate of this bridge illustrates the process of decision-making at Church Street South. As the ring road was a hotly contested political issue at the time, the agency would not make a commitment about the eventual status of Columbus Ave. Moore himself faced a dilemma: Do you make the bridge only as wide as the existing two-lane road, and risk the possibility that it might not be rebuilt should the road later be widened? Or do you make that bridge wide enough to span the proposed four-lane road, and also make it easier politically for proponents of the ring road to get it built? Not that the question of where the funding for the bridge would come from had been settled, since FHA maximums wouldn't include such necessary amenities. Moore's first proposal for the bridge had included shops and apartments, but the FHA didn't think much of a Ponte Vecchio and refused to fund the apartments located there. While the housing and shops were dropped, the bridge remained, in theory at least. But when the city sent a contractor to repair the part of Columbus Ave. that had been torn up during construction of the housing, the residents blocked the bulldozers and the intimidated contractor left the site. For the moment the road is closed except for local parking, and since there was no longer a road, no bridge was built. In Moore's words, "It is a curious irony that people must oppose what they do need in order not to seem to encourage what they do not need."



Jose Marti Court looking toward the walk with small office building, supermarket and another fountain at the end. Interior, skylit corridor leading to the offices on the second floor is painted a bright yellow.

It took 32 site plans and agency reviews before a design for the project was finally approved. One long controversy involved covered *vs.* open parking: The agency wanted parking under the units to keep as much of the ground free for recreational use as possible; Moore, on the other hand, wanted the units to have direct access to the ground and saw gardens preferable to garages. The compromise is close to 50-50, with the four-story units having parking under one side of the building with access to the ground on the other. The three-story units have separate parking altogether. Curiously, what resulted after 32 site plans was not a decisive resolution of the parking question but a cohesive, intense site plan with the pedestrian spine and commercial facilities as the central organizing element. The pedestrian walk begins directly across the street from the station and proclaims itself with bold patches of colored signs over the stores. Along the walk are stores, a supermarket, a laundromat, head start center and small offices. Parts of the walk are just for walking, others for gathering. There are see-throughs in some places and not in others. There is a constant variety in the sizes and shapes of the buildings, giving a sense of crowding and activity.

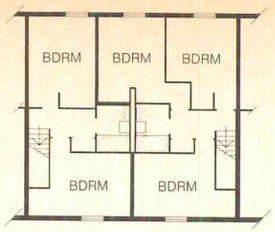
The housing is organized off this central axis and provides a sense of calm and order in the regular rhythms of its façades. One of the unique aspects of Church Street South housing is the variety that is achieved not only in the small details but also in the overall planning. The length of the buildings vary from as small as two units to as large as eight. Working with such increments and placing combinations of these lengths together, the architect provided courts and streets of different sizes and shapes. Besides having variety for purely visual interest, the architect was concerned that the occupants could identify with a small fragment of the project as a whole. To strengthen the identity of the small courts and streets, the architect gave each a name so that each unit has its own city street address.

Each housing group connects to something beyond. Some open directly off the spine through archways and lead to other housing groups; some end in public open spaces with community rooms and laundry facilities; others lead through narrow walkways to play areas. There is rarely a point where one is not aware of something beyond, and the number of routes to any one point allows the resident the opportunity to explore or not, as he chooses.

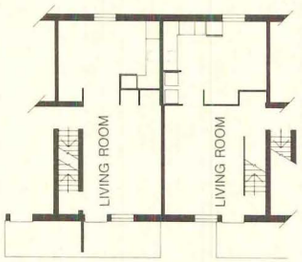
Another type of variety occurs in the paving patterns both on the pedestrian spine and the housing streets. At the forum, semi-enclosed by concrete walls and portals, the paving is alternate wedges of asphalt and concrete which radiate toward the wall from a circular fountain. Along the rows of housing, the main circulation space is asphalt-paved, but the entrances to the houses are in radially scored concrete with oversized semicircular, painted curbs to define the territory of each unit.

What has been completed is not in appearance what was shown in the "final" approved design. The housing structures were to be a system of precast concrete—concrete since the project was in the fire district and precast at the suggestion of the developer to keep costs low. Although the developer was expected to work with the architect throughout the design stage, he did not, in fact, estimate costs until design was com-

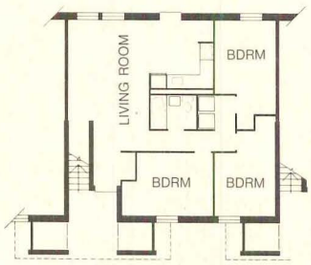




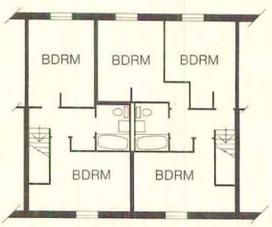
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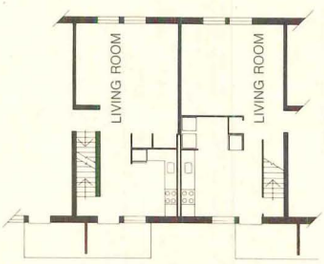
2nd FLOOR 2 and 3 BEDROOM DUPLEX



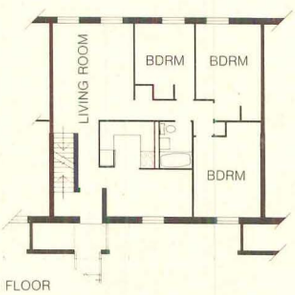
1st FLOOR 3 BEDROOM



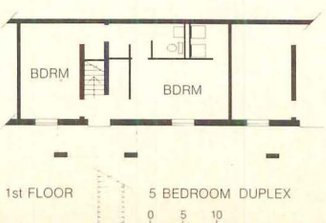
4th FLOOR



3rd FLOOR 2 and 3 BEDROOM DUPLEX



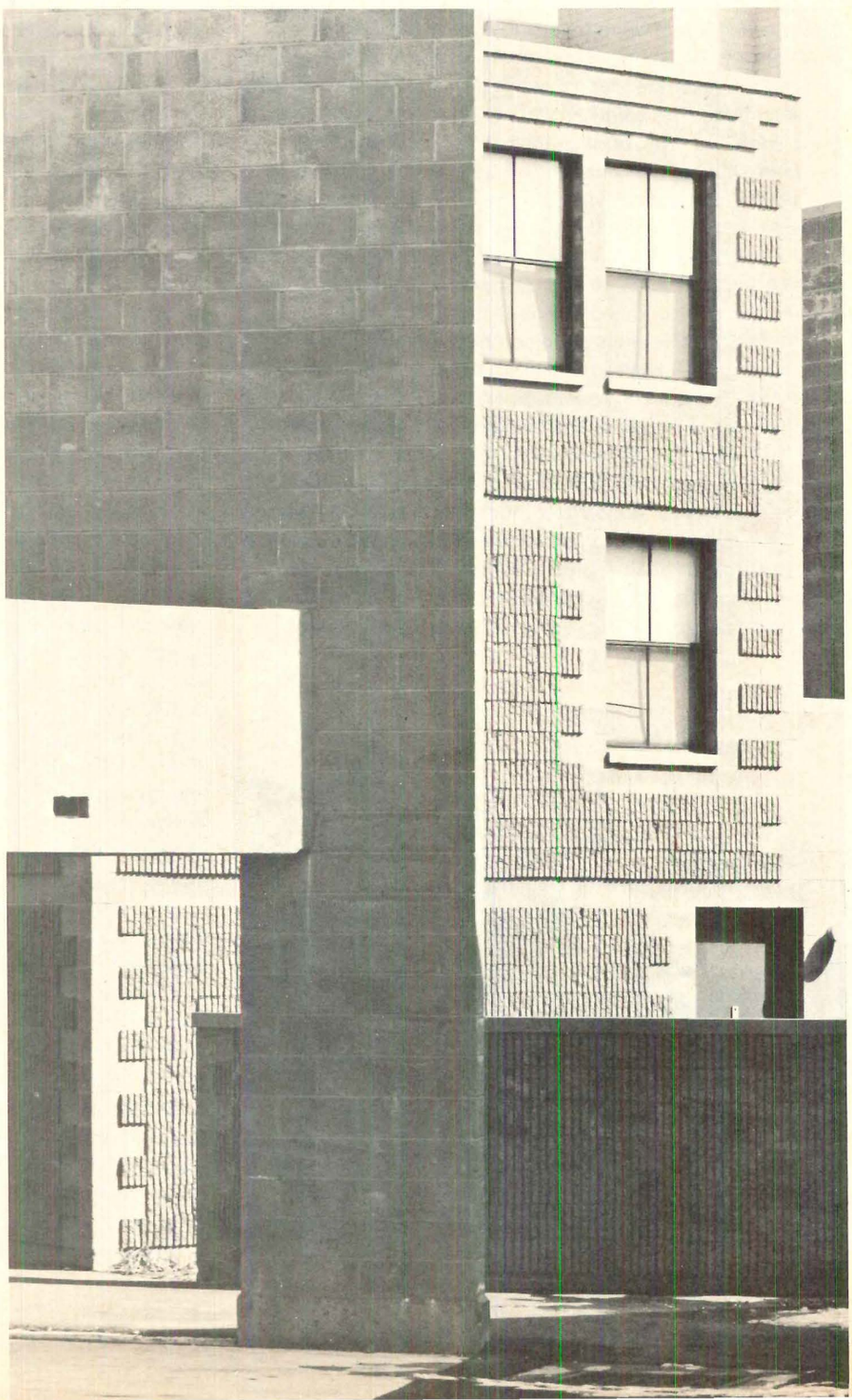
2nd FLOOR



1st FLOOR 5 BEDROOM DUPLEX

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Photo detail (below) shows the use of scored block on the façades, the assymetrical rustication around the windows and the cantilevered block cornices at the roof. Photo above is taken across the bridge-like entrances to the four story units on Christopher Green.



pleted. At that point, the developer had to change the precast panels to concrete block to save $800,000 and to stay within FHA maximums. As there was little time to redesign, the units were constructed out of block with the regularity in design demanded by precast. The first few months of construction made a vivid impression on New Haven and Mayor Lee, who felt that the project more closely resembled army barracks than housing. Although Mayor Lee has since retracted his earlier statements, the impression nonetheless remains in some minds.

At some point in time after the change in the building material, it became apparent to the architect that the concrete block demanded more or less radical visual treatment. The project had lost many of its subtleties of wooden stairs, smooth concrete façades with brick end walls and electrical garbage disposals. Such details as the cantilevered block cornices and rustication—reversed and asymetrical—around double-hung windows lend a sense of humor to the concrete block façades. The painting over the doorways of the four-story units is an even subtler abstraction of history. Taken from the Collegio di Propaganda Fide in Rome, the shapes and colors repeat the rhythms of the window moldings of the Collegio. While the two-dimensional painted pattern is something less than Borromini might have wished, it gives Church Street South a vitality and energy that one often feels in the voluminous contortions of Baroque façades.

Church Street South is a project that has raised some comment among New Haven residents and hostility among some architects. The question seems to center around the image of the buildings as barracks and the paint as a superficial covering of the blemishes. Redevelopment Agency officials, acknowledging that Church Street South has a life, vitality and certain amenities that most low-income projects lack, feel that the status requirements of low-income families are better satisfied by projects such as those by Louis Sauer presented elsewhere in this issue. According to James Drazen, Housing Development Director for New Haven, the Sauer projects have a more detached suburban image in the massing and materials than does Church Street South. For this reason alone, Drazen feels the Sauer projects are better received both by the future occupants and by the area residents. The ideas that generated Church Street South, however, are quite different from those which made the Sauer projects what they are. At the time the programming for the Church Street South site was done, the city was experiencing feedback from some of its earlier projects like Florence Virtue—a two-story, very low density development. The city felt that the low density did not provide for the interaction and intensity of activity not only appropriate, but desirable, for an urban setting. Church Street South reflects much of the earlier urban planning in this country—Boston's Beacon Hill, Philadelphia's Society Hill—in the organization and variety of the streets and open spaces. The paint—which many see as part of the remedial efforts of urban renewal—is another tool for Moore to use and a gesture to show that the place was being thought about and cared for. As part of the programming, Moore consulted with the Relocation Agency on the preference of those who would be occupying the project and arrived at unit plans which similarly satisfy the needs found in Sauer's survey. Moore was also convinced that five-bedroom units were needed in this type of project, although FHA maximums would not allow extra money for the fifth bedroom. The fifth bedroom was termed "other habitable room"—allowable under FHA regulation—and within the cost limits of four-bedroom units.



Because of delays in construction starts on the second phase of 100 units, funding from the government had been withdrawn. When renewed funding finally came from HUD, the developer asked for even more money. Construction had taken three years to complete instead of one and one-half years and costs had escalated since the original contract was negotiated. Though HUD acquiesed several times and gave the developer more money, he finally quit, leaving the city with the funding but with no one to build. By the time a contract was negotiated with a new developer, HUD had lost patience and withdrew the money again. Due, also, to lack of money from the developer, most of the site work on the first phase was accomplished only because the city called the outdoor space a park and could then appropriate federal recreational money for landscaping and play areas. With the rest of the project waiting to be built, and much of the site work not yet completed, it is difficult to assess the success or failure of the project for those it most concerns—its residents; no one prefers living amidst the litter of construction.

The remaining units need to be built, not only to provide more housing and a day care center for 60 children, but to complete the site development and the pedestrian spine which would strengthen the connection between the project and the rest of the city. More important, perhaps, is to complete the project for the people who have made a commitment to live there, so that the project can be used, evaluated and understood on the basis of its intent. Yet, despite the confusion of intents among all those involved in the project, the continuing improvisation that characterized the entire process has made Church Street South emerge as a very definite "somewhere" with qualities of its own that make it a unique piece of low-rise urban planning. [SLR]

View of the forum (above) toward the railroad station is taken from the front porch of a house on Christopher Green. View across Christopher Green (left) toward the forum, stores and railroad station.



Data:

Project: Church Street South housing, New Haven, Conn. 400 units of low-moderate, low rise housing; 309 units of elderly, 93 of which are public housing. All other units financed under section 221 (d) (3).
Architect: ML/TW Charles Moore Associates.
Structural system: load bearing walls.
Mechanical system: 6 central oil fired boilers with fin tube baseboard units individually controlled.
Major materials: concrete block—scored and plain—paint on exterior: gypboard, paint on interior.
Costs: phase 1 of low rise (301 units) $14 sq/ft including commercial space. Total development cost: $6.155 million. Public housing (93 units) $28 sq/ft. Jewish Community Tower (217 units) $22 sq/ft.
Developer: Development Corporation of America.
Photography: Lee Ryder, A. Wade Perry (except where noted).

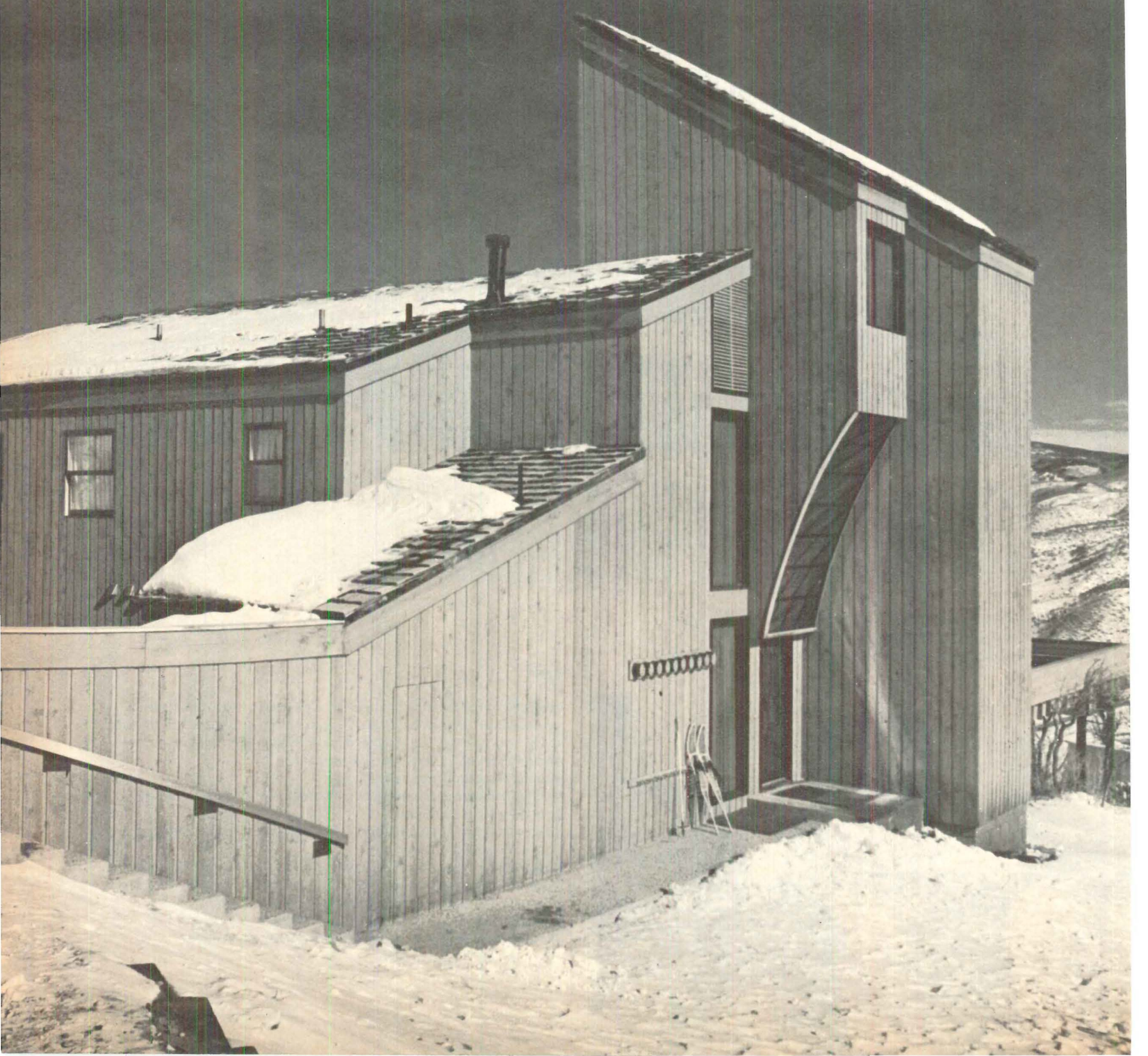
Yocum lodge

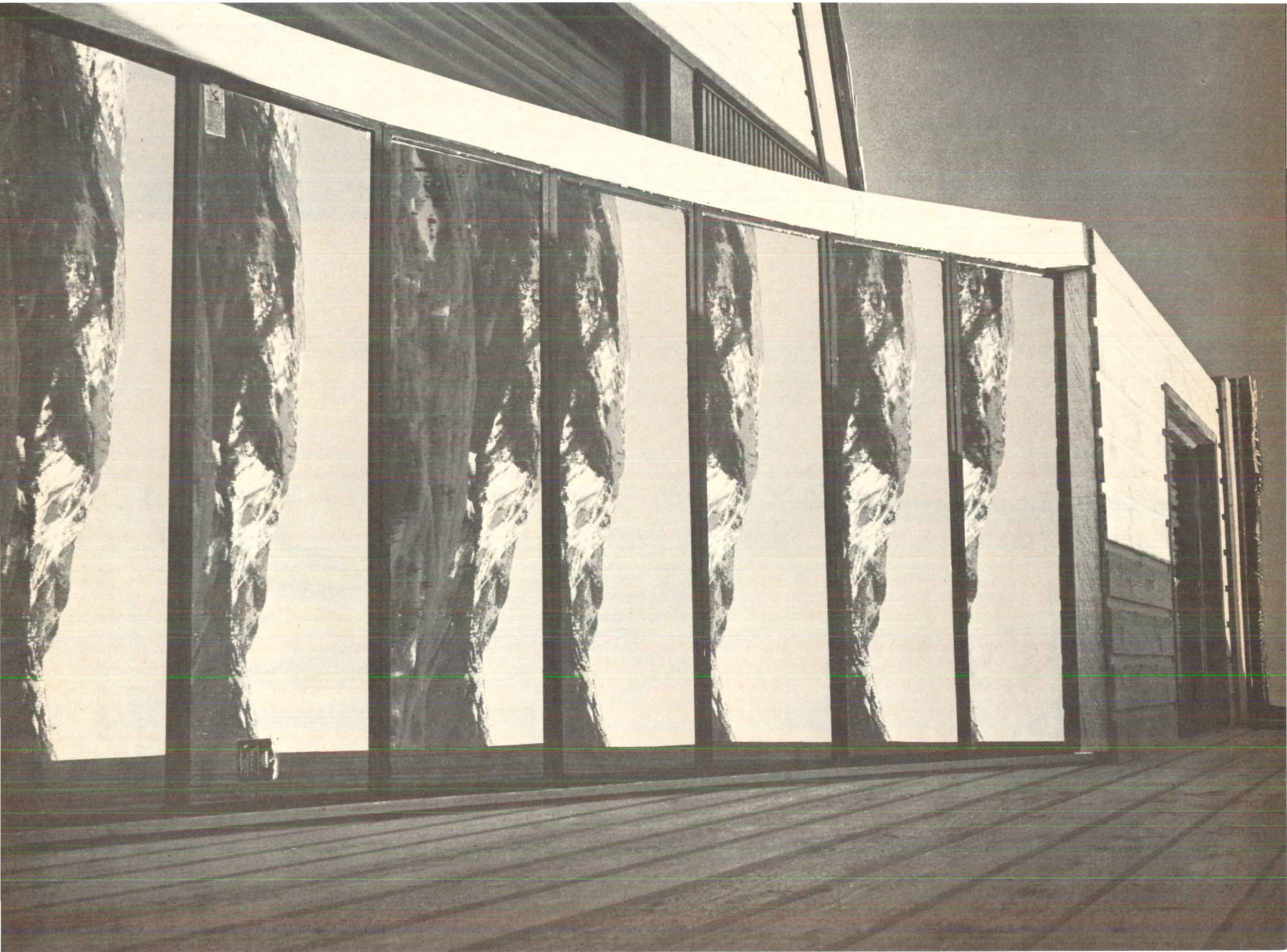
Warm-up

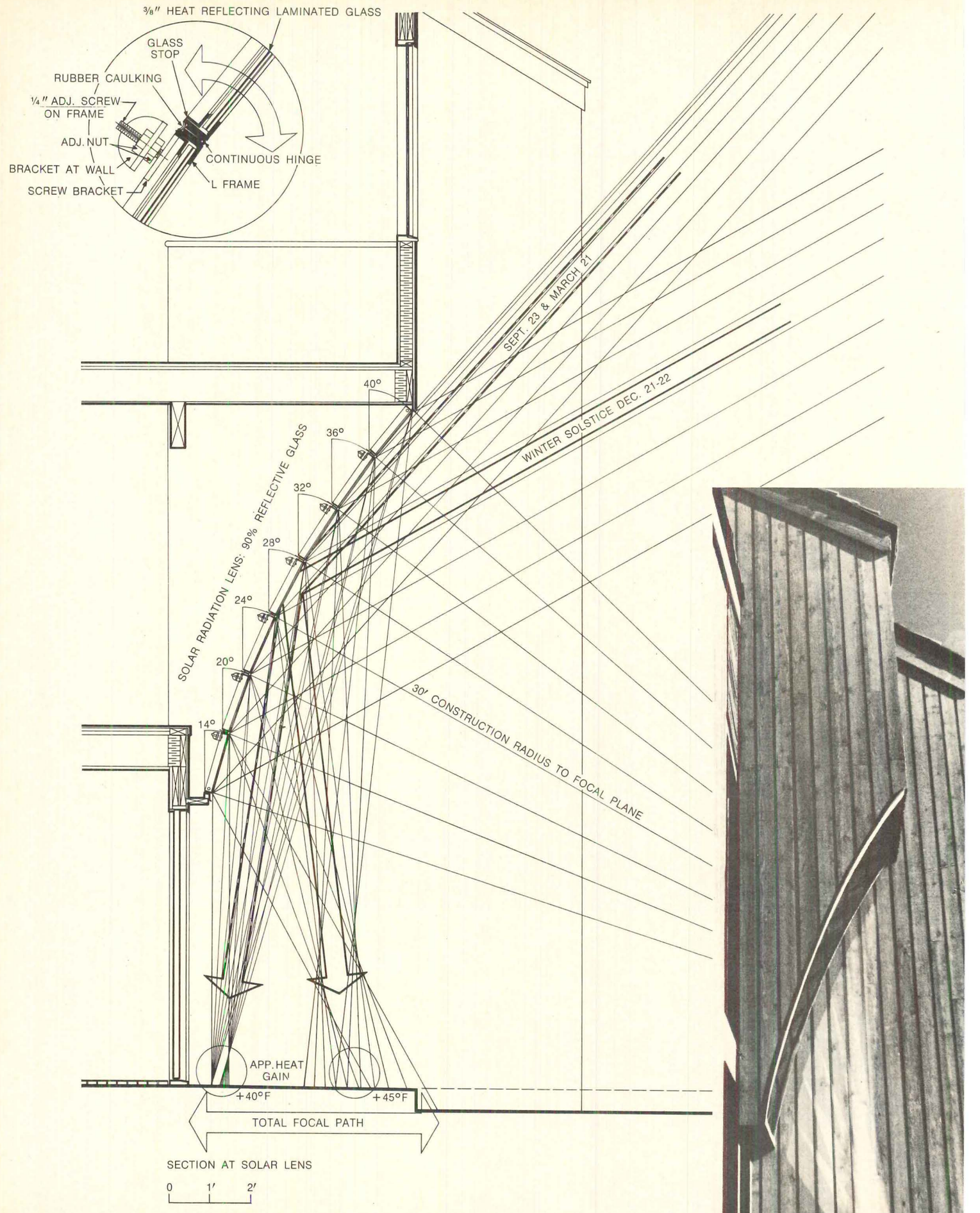
To prevent snow from accumulating at the entrance, the architect has equipped this ski lodge with a melting device that operates solely by concentrating solar energy

In most ways, this is a very straightforward house, a simple solution to simple needs: spaces to accommodate overnight guests and multipurpose activities. In short, a ski lodge that can take care of its owners, their guests and itself. Architect James Lambeth has used simple geometric volumes and massing to recall existing mining structures and barns in this area of Colorado. High use areas were built to withstand ski boot abuse and lounging areas provided for comfort. These considerations, plus sun deck and ample sleeping, bathing and entertaining facilities enable the house to serve many ski weekend and vacation functions.

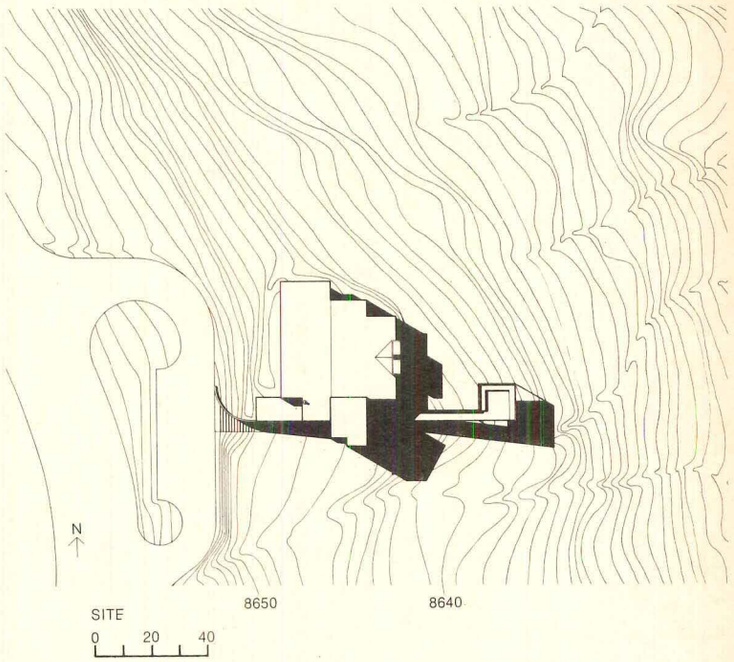
The architect has also tried to build into the house several



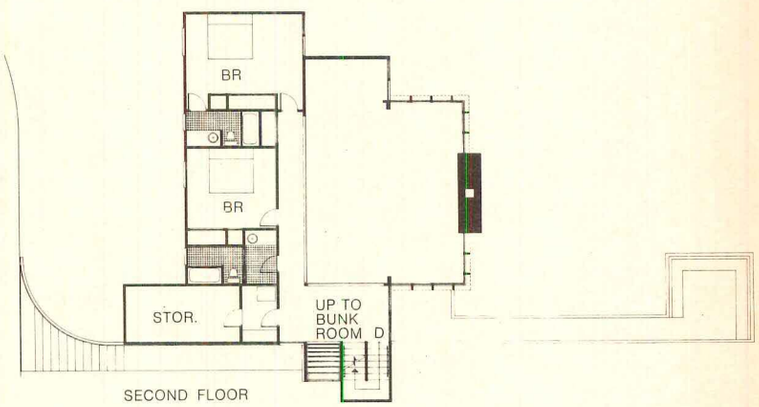


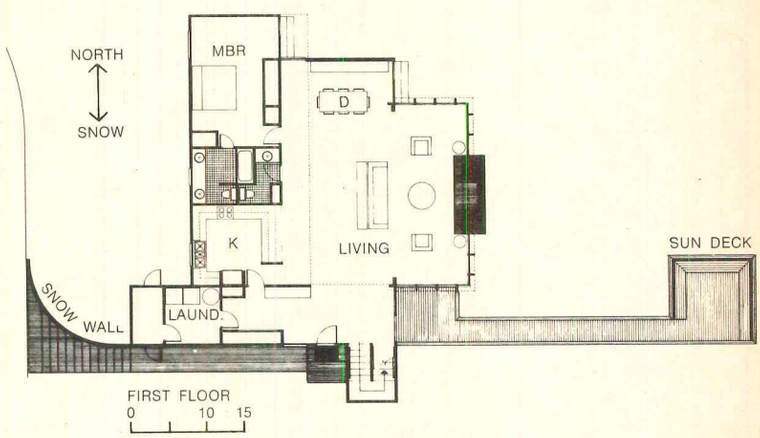

3/8" HEAT REFLECTING LAMINATED GLASS
GLASS STOP
RUBBER CAULKING
1/4" ADJ. SCREW ON FRAME
ADJ. NUT
BRACKET AT WALL
SCREW BRACKET
CONTINUOUS HINGE
L FRAME
SEPT. 23 & MARCH 21
WINTER SOLSTICE DEC. 21-22
40°
36°
32°
28°
24°
20°
14°
SOLAR RADIATION LENS: 90% REFLECTIVE GLASS
30' CONSTRUCTION RADIUS TO FOCAL PLANE
APP. HEAT GAIN
+40°F
+45°F
TOTAL FOCAL PATH
SECTION AT SOLAR LENS
0
1'
2'

exterior self-maintenance features which will make life easier for occupants. Tests of prevailing north winds on study models led to the curved snow wall configuration used to protect the entrance. The realization that snow build-up near the door could not be eliminated entirely by the snow wall prompted the design of an interesting device to finish the job. Long an advocate of visual involvement of observers with the built environment (P/A, Oct. 1968, p. 174 and May 1971, p. 112), Lambeth has used reflective glass in several ways. In this house, however, its successful use as a snow melting lens demonstrates a principle Lambeth intends to put to more extensive use. "It was found that a mirror glass surface of 80 percent reflectivity could produce a heat gain of 40 to 45 degrees at the focus plane. The lens works as planned. It feels like an electric heater high above your head. The snow is not only melted, but is vaporized," says the architect. Plotted to collect incident sun and reflect it on a given focal path from September through March, the lens is an initial, if small, demonstration of energy conservation. Its application to winter heating on a large scale is being studied. [JM]









Data

Project: ski lodge for Dr. and Mrs. David Yocum.
Architect: James Lambeth, designer.
Site: Snowmass-at-Aspen, Colo., site slopes to the east and south, toward valley and mountain views.
Structural system: simple wood framing, post and beam in living area.
Mechanical system: forced warm air with humidifier.
Major materials: exterior, rough-sawn vertical cedar siding and cedar shingle roof; interior walls are cedar in high activity areas and gypsum board elsewhere; floors in high activity areas are brick pavers, with carpet on the remainder. Glazing is bronze tinted in windows, gold laminated reflective glass in the lens.
Costs: not available.
Photography: Rush J. McCoy.

The other side of the housing problem

Almost two-thirds of the country's substandard housing is outside urban areas, where a slumping rural economy and a lack of programs to aid the poorest aggravate the problem

Forest Upshaw, an architect with a very small office in Dallas, has become a missionary. Ever since he designed a 12-unit nonprofit rental project in Frost, Tex., he says he would like to see one in every small Texas town he visits. "I talk to people like school superintendents who might be looking for a way to provide housing for their teachers, or to bankers or even the guy at the service station," he says, "trying to put a bee in their ears about the Farmers Home Administration programs, so that maybe they'll start talking about it among themselves and want to know more about it."

So far nothing has come out of this missionary work. Upshaw keeps running up against problems. One, he says, is that the economy of the small towns and rural areas he visits is in a slump, particularly in the area of agriculture; the other is a "what's in it for me?" attitude.

And there, in a Texas pecan shell, is the problem in rural housing. "Most people of limited income would be interested in these programs and need them," Upshaw says, "but can't do anything about them; those who have the means to get something going aren't interested." Those who have been interested in rural housing problems find that the situation passes all understanding. Commonly held beliefs about housing in rural areas remain true, but the results aren't what we're led to expect.

A study by the Office of Economic Opportunity points out that housing costs less in rural areas, $14,500 on the average for an 1100-sq-ft, three-bedroom house with 350 sq ft of additional space; rural people of all incomes spend less for housing than do residents of urban areas. In spite of these facts, rural people, no matter what their incomes, are more apt to live in substandard housing than their urban counterparts. One house in every six lacks plumbing, is deteriorating or just plain falling down, according to 1968 figures, and not much has changed since then. There just isn't enough good housing being produced, even for those who can afford it.

Substandard housing, by the way, has a specific meaning. The Census Bureau definition, on which most official estimates are based, seem to hinge on plumbing; its three categories of substandard housing are "sound with inadequate plumbing facilities," "deteriorating with inadequate plumbing facilities," and "dilapidated." To the Rural Housing Alliance, a vocal spokesman for the rural poor, that is an extremely limited definition. It doesn't consider size or crowding; amenities other than light, ventilation and plumbing; presence or absence of insects or rodents. It's reasonably safe to bet that the official figures underestimate, rather than overestimate, the amount of bad housing—rural or urban.

Market problems

It is tempting to see all that as simple to solve but it isn't. Land, surprisingly enough, is one problem. Land costs are generally thought to be low in rural areas, but in some parts of the country this just isn't so. In Appalachia, for instance, there is little level land upon which to build; in California, where the high crop yield raises the land values, usable land comes high. Prices above $15,000 an acre aren't uncommon for good agricultural land. A third reason for rising rural land costs is speculation, usually prompted by urban spread.

The costs of developing sites are also surprisingly high in some cases. Soil conditions can push the cost of waste disposal facilities beyond the limits of federal subsidy programs, and off-site water and sewer connections can be too expensive for low-income families.

The basic problem—the fundamental weakness—in the whole rural housing scene, however, is absence of an adequate system to finance and deliver housing to rural residents, particularly those with low incomes. The rural housing market is too diffuse to support large scale private building: 30 percent of the U.S. population spread over something like 98 percent of its land. That doesn't provide the efficient use of time, money, labor and materials that attracts large builders and developers. Nor does it attract the sort of private investment needed for a vigorous private housing industry; banks and other financial institutions can do better by investing in urban and suburban growth. The local credit resources of rural areas are weak, and for the lower income levels they are virtually nonexistent.

Credit where credit is needed

With private credit in short supply, it has been the Farmers Home Administration (FmHA), part of the Department of Agri-



culture, that has financed most rural housing. Getting money to rural areas where it is needed has been a major point in FmHA's loan programs. Through them, the agency supplements other credit sources, making loans to low- and moderate-income families who can't qualify for credit from conventional sources, or providing credit in areas where other sources don't exist. It has been a rapidly growing effort: in 1969 FmHA made 50,000 loans for a total of $500,000; in 1971 the total was 150,000 loans and $1.5 billion; and for this year the agency projects $2 billion. "We've lent more money in the past 3 years than in the preceding 20," says deputy administrator Louis Malotky.

While FmHA has generally been providing housing subsidies and credit, it has also moved into other areas. It provides technical assistance to groups involved with self-help housing programs. "We are the only federal agency really into self-help," says chief architect Richard Slater. We have been for at least 10 years." The emphasis, he says, is on mutual self-help rather than do-it-yourself efforts. The agency also offers other types of technical assistance. Each county officer is a jack-of-all-trades, but he is backstopped at the state and local level by a staff of architects and engineers who do field work, review plans and give advice on problems.

Also growing in the FmHA efforts are its programs for rental and cooperative housing. Since the rural rental program started in 1964, some 11,000 apartment units have been completed or are under construction in all 50 states, Puerto Rico and the Virgin Islands, with the help of more than $90 million in FmHA funds. The builders have been local communities, community groups, private sponsors; the tenants, elderly people and families with low to moderate incomes.

The basic intent is to provide credit. Nonprofit corporations, consumer cooperatives, profit making individuals, partnerships and corporations, and cooperatives owned, occupied and managed by low- and moderate-income families or senior citizens, may qualify for the loans. Occupants must be low- and moderate-income families or senior citizens; rental and occupancy charges are based on income and family size.

Depending on the size of the project, standard plans and specs may be used, or full architectural services required. FmHA reviews the plans and inspects the construction. Local codes for buildings, water and waste systems, heating and electrical systems must be met along with FmHA standards. The site must be convenient to community services, with safe water and waste disposal. All housing, says FmHA, should be sited "in an attractive manner to avoid straight line monotony, and to accent and preserve the advantages of the natural topography, trees and shrubbery."

Nothing for the poorest

To the Rural Housing Alliance, there is one glaring gap in almost all rural housing programs. In spite of the recent growth of FmHA's housing efforts, says an RHA spokesman, the agency "doesn't spend enough of its energy helping the very lowest income families." The loans must be repaid, which calls for *a minimum* income; even the programs with interest subsidies don't do much for families with yearly incomes below $3000 or $4000. Self-help programs, and loan programs for repairs help, RHA says, but not enough.

Other groups are also active in rural housing programs. The Appalachian Regional Commission has a fund of $3 million for local sponsors to develop low- and moderate-income housing in growth areas, which includes some rural areas. The council also helps with technical assistance contracts. HUD does a certain amount of work in rural areas—small town public housing and loans with interest subsidies—but it is primarily an urban agency. The staff is basically urban oriented, says an RHA spokesman, and doesn't think rural. HUD programs tend to depend on local housing authorities, which don't exist in some 40 percent of the counties, and most FHA loans are made by private lenders, also scarce. The Bureau of Indian Affairs runs a limited housing program that provides technical assistance to Indians in federal housing programs; there is also a program to repair bad housing on reservations.

The Office of Economic Opportunity, which has recently begun to give rural problems priority attention, sees a considerable vacuum in the area of public housing and nonprofit housing. While FmHA county officers have been active in helping organize nonprofit sponsors for rental and co-op housing, OEO feels the programs are basically inadequate. Public housing requires a local housing authority; nonprofit housing requires sponsors of some sort, like the group that brought about the small project in Frost. Forest Upshaw found out why not much of that gets done: those who are interested lack money, those who are moneyed lack interest.

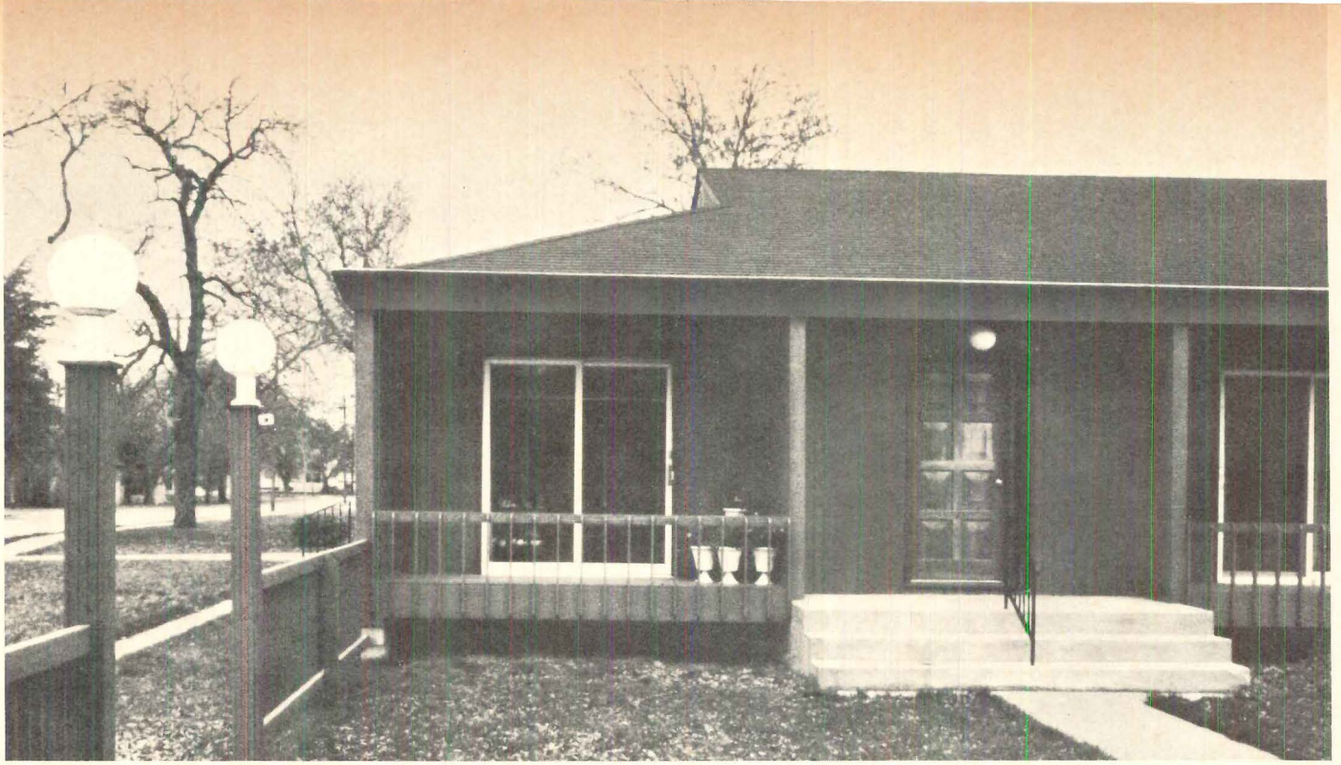
OEO itself has funded a series of rural housing development corporations, either through its housing branch in Washington or through regional and local OEO offices. No breakdown between rural and urban exists, but OEO estimates that it spent around $25 million in fiscal 1971 for housing activities in urban and rural areas.

To encourage the growth of local housing development corporations, OEO provided money to set up a group called the Housing Assistance Council. The Council, says executive director, Gordon Cavanaugh, will provide training, technical assistance and seed money to low-income housing producers (housing development corporations) outside metropolitan areas. Starting out with a $2 million revolving fund for seed money, plus another $1 million each for staff and technical assistance, the Council opened for business the first of November. It is now receiving and reviewing applications.

OEO's Volkswagen

OEO is involved in another approach to the problems of the poorer rural residents—a recently announced program to develop what the press reported as a "Volkswagen house." According to David Engle, director of the housing branch of OEO's office of program development, OEO wants to build an $8000–$9000 house by simply building less house.

The size of the house would be smaller: where FHA and HUD like two- and three-bedroom houses for easy resale, OEO wants to try one bedroom and even efficiency houses. The design would be greatly simplified: flat roofs, combination inside/outside walls, dormitory rooms for children. Without scrimping on essentials, the amenities would be of a lower order: bath and kitchen fixtures would be less costly, shelves would be used in place of built-in cabinets. And OEO hopes to see some technological improvements.



Herman, Minn. rural rental project, designed by Robert F. Ackermann & Associates, was built under FmHA programs (Warren Reynolds photo)

One thing that influenced this program, Engle says, is that FmHA and private builders have been moving up housing standards through the years, pushing houses out of the reach of the poorest families. OEO had even thought of doing away with indoor plumbing, reverting to outhouses, but FmHA talked them out of it. One problem: the Census Bureau definition of substandard housing; OEO couldn't get very far building units that by definition increase the stock of substandard housing. So OEO plans to build down to the definition, providing indoor hot water, a safe stove, adequate and safe heat, pure water and adequate space—all at a price that could be afforded by a rural family with two children and a yearly income of $2400.

The $4.5 million program gets going this year with large scale "broker grants" to groups who will in turn make 10 planning grants. Four of those will be chosen for demonstrations; two sites will be in the South, one in the Southwest and one in the Northeast or Northern Plains area. Physical standards will be set locally; cost goals will be set in Washington.

Needed: development policy

The most important thing that could be set in Washington, however, is an overall policy for rural economic growth, for at the bottom of the rural housing problem is a widespread rural economic slump. What is needed is the sort of attention that has been given—successfully or not—to urban America. There are no massive rural development programs—no rural renewal, no model counties; there's no department of housing and rural development.

The closest thing to such a department has been the U.S. Department of Agriculture, which has tried, in some cases successfully, to stimulate rural growth through its programs. But the sort of large scale policy that is needed has only recently been outlined by President Nixon in asking Congress for a $1.3 billion rural development credit fund. The program would consist largely of federal loan guarantees, but other major elements in the plan include revenue sharing with the states and transfer of some USDA functions to the proposed Department of Community Development. State and local officials would have more power of development programs: 80 percent of the loans would be allocated by the States, the rest by the Secretary of Agriculture.

One reason such programs have been slow in coming has been the lack of a strong voice for rural problems. Until recently, the strongest voice has been that of the Rural Housing Alliance, a tax exempt group that can't lobby on Capitol Hill. As a result, a number of people, including some RHA members, set up the National Rural Housing Coalition; Clay Cochran is the chairman of the board, and in that capacity he is a registered lobbyist. The group has drawn up a set of resolutions which it is vigorously promoting.

Another new voice on the rural scene is The Coalition for Rural America, Inc. This lobby has set three main priorities: a broader rural credit system, tax incentives for private rural investment and rural economic development districts coupled with noncategorical funds for rural development. Directors include a former secretary of agriculture, several former governors and industrial, economic and labor leaders along with farm representatives.

In the meantime, the best hope for rural housing seems to lie in a bill recently introduced in both houses of Congress. It would set up an Emergency Rural Housing Administration—an independent agency with the goal of ending bad rural housing within a specific time period, perhaps five years. Operating in rural areas and towns under 25,000 in population, the new agency would use existing programs and work through new or existing public bodies wherever it could, but if necessary, step in and do the job itself, using its own subsidy programs. It would give priority attention to the problems of the very poorest.

Although there is growing awareness of rural housing problems, Phil Browne, RHA's information director says "It isn't likely that anything as massive as this bill proposes will get through this year." The hearings, however, will get rural housing problems on the record, and they may stir up interest and other activity that will at least do something about that two-thirds of the nation's substandard housing that is in rural areas and small towns. [CP]

Hayasaki residence

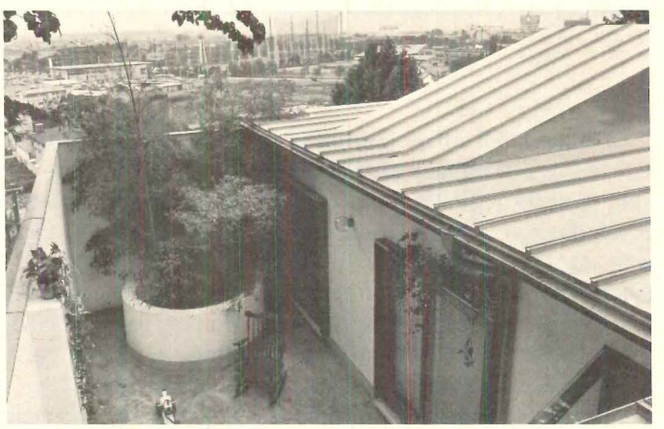
The blue box

As if to prove the point that a single family dwelling can yet be built, even under adverse site limitations, Tokyo architect Mayumi Miyawaki has designed a unique box for living

"The Blue Box" is a response to all of the constraints imposed by a site that is too small, too steep and too encroached upon for most people to consider it desirable. Of a total site area of 1690 sq ft, only 568 sq ft was found to be usable, and it slopes at about 45 degrees. In addition, views are currently limited to the sky and to the west, with considerable uncertainty about how long to count on the latter. These factors led to the acceptance of an enclosed box, thrust into the hill, with sections cut out for controlled vision and light. Cut-out volumes define a re-entrant window wall in the living room, a walled courtyard on the upper level, and a tube connecting the other two volumes. Five bamboo trees grow through the tube. The lower level lounge pit is expressed by a projecting cylinder dropped below the house.

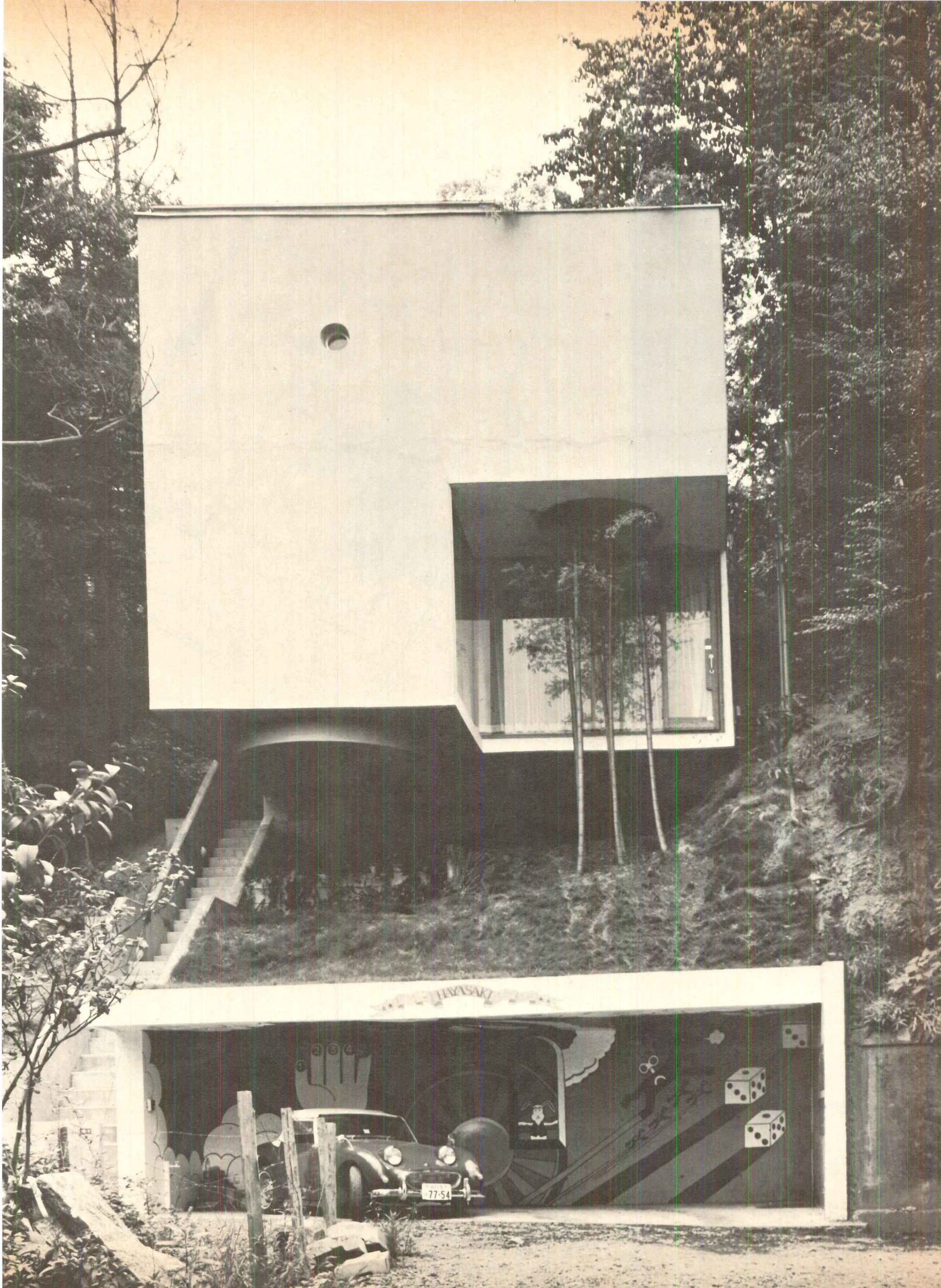
Double concrete walls protect those rooms where below-grade conditions occur, and poured concrete side walls, acting as beams, cantilever about 16.5 ft from the slope. Original plans to build a pure concrete structure had to be modified because bearing capacity of the soil was poorer than had been anticipated, and wood was substituted where possible to save weight and cost.

Respecting what he feels are peoples' natural movement patterns, the architect has avoided right angle circulation paths. Although he had originally worked out a more comprehensive movement plan, the additional foundation costs made some deletions necessary. The glazed stair enclosure borrows light from the courtyard by projecting into it and into the dining area below, providing a visual extension of the dining space. Skylights also bring light into the children's room and the Tatami (Japanese style) room, and a round porthole window was added when the owner's son requested a view of Mount Fuji, as long as the view lasts. The owners also chose the garage wall graphics, furnishings and color schemes, and plan to landscape the slope in front of the house. [JM]



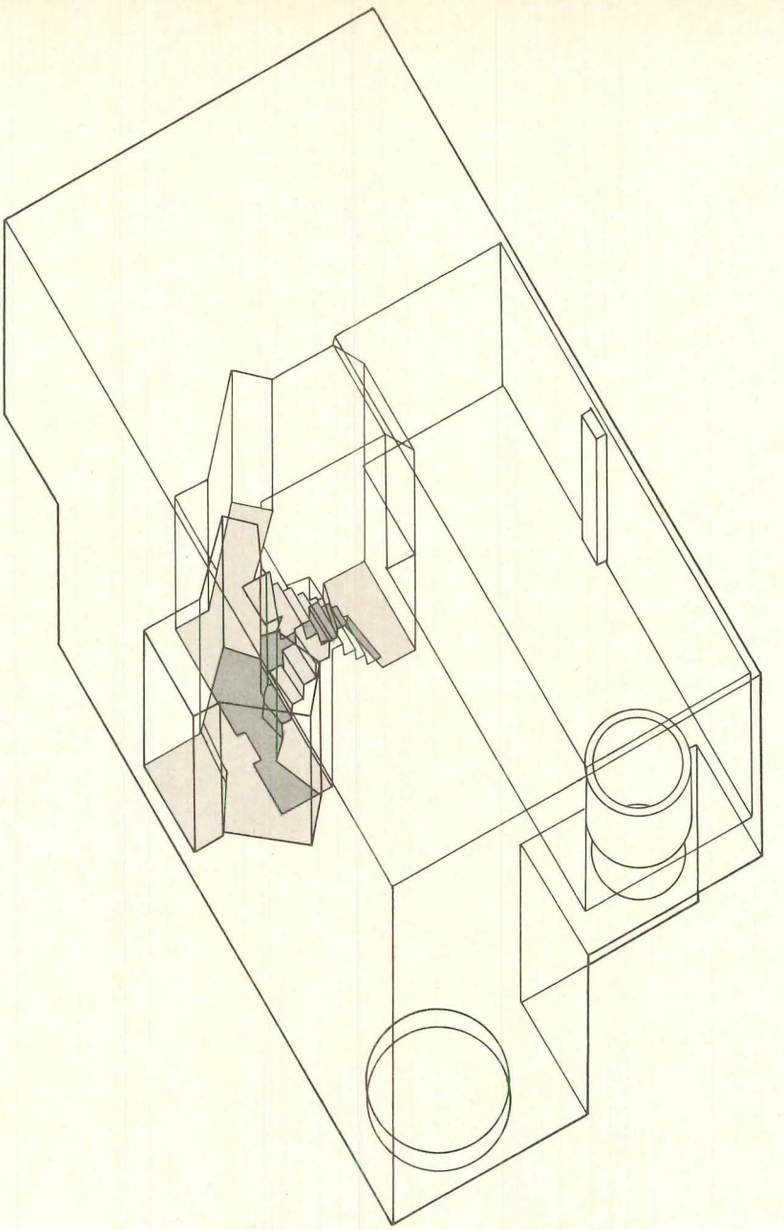
Five bamboo trees (below) grow through a tube into the walled upper courtyard (above). The round projection below the house is the lounge pit. Garage wall graphics are by the owner, as were the interiors.



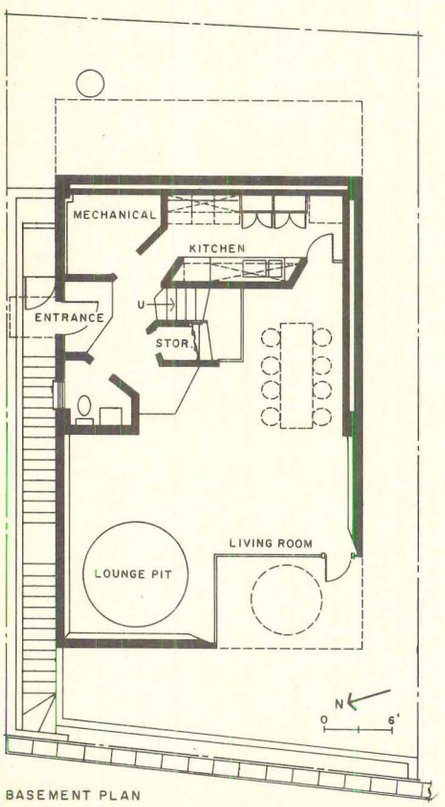

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The blue box

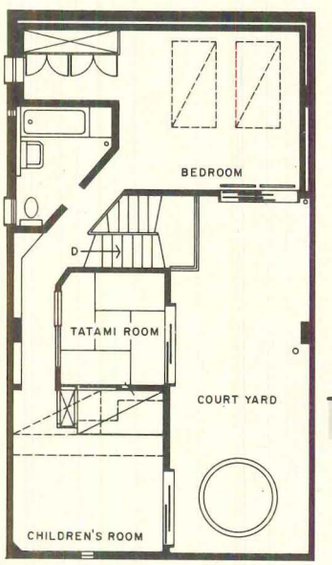




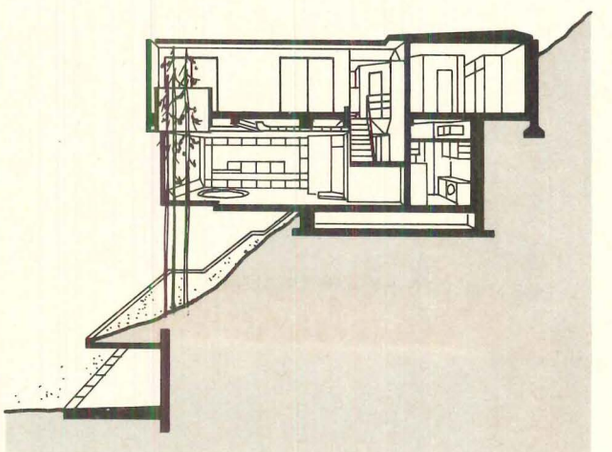
Cut into the hill, the blue box takes advantage of the only usable part of its site (above). Circulation within the house (below) reflects the architect's concern that movement not be restricted to straight paths and right angles.

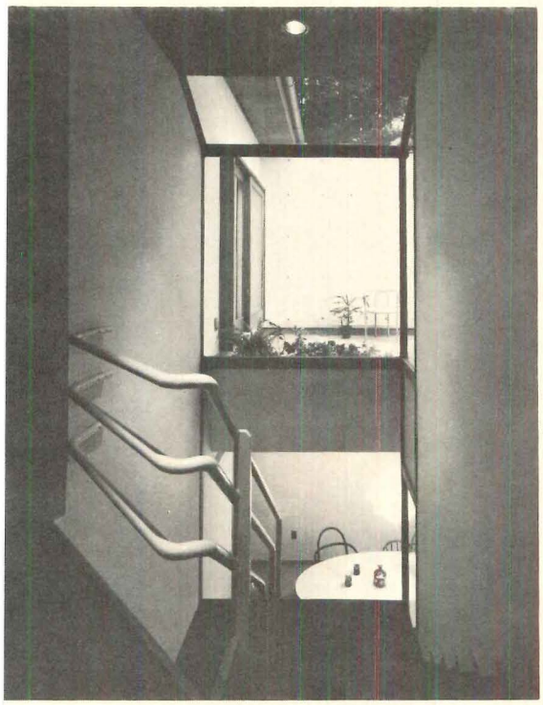


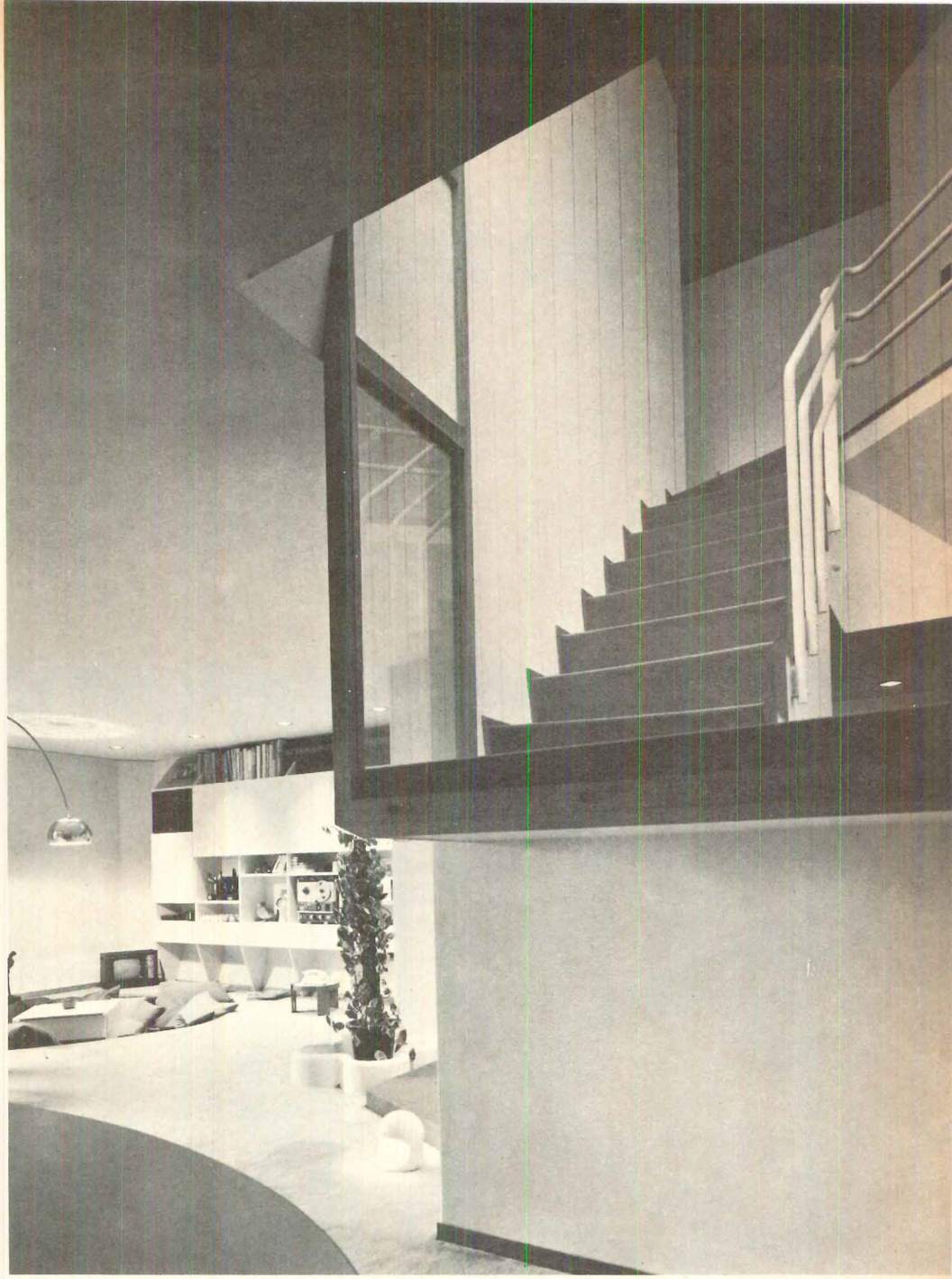
BASEMENT PLAN

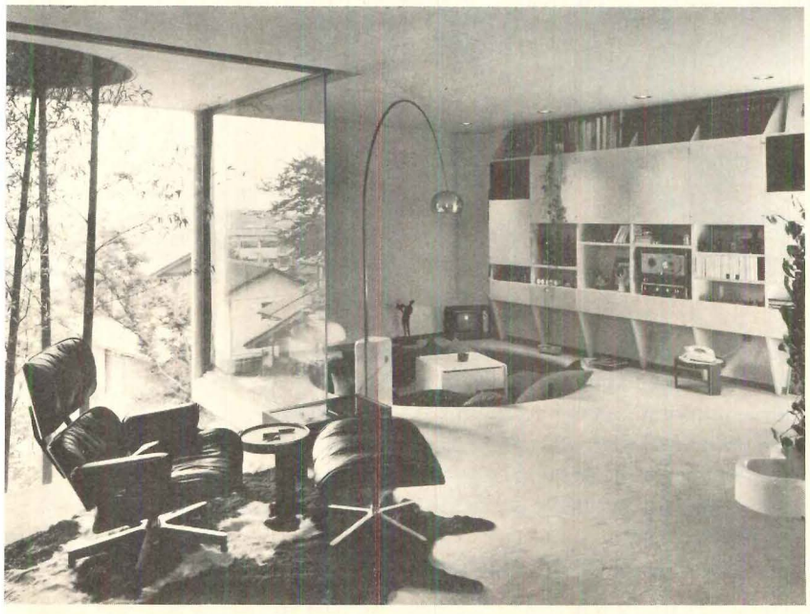


FIRST FLOOR PLAN









Although the house looks very confining from the street, interiors draw light from the re-entrant living room wall (left, bottom), and also from the walled courtyard, through the stair well (above and left, top) and the bedroom glazing. Skylights add light to the Tatami and child's rooms.

Data

Project: The Blue Box house (Hayasaki house).
Architects: Mayumi Miyawaki, Architect & Associates.
Site: steeply sloping, 1690 sq ft in Kaminoge, Setagaya Ward, Tokyo.
Structural system: reinforced concrete, partly wood on upper level; side walls act as beams, cantilevering approximately 16.5 ft.
Major materials: exterior walls, poured concrete with blue acrylic emulsion paint; interior wall surfaces, plaster; ceilings, painted plaster board; floors, carpet.
Photography: Osamu Murai.

Collignon residence

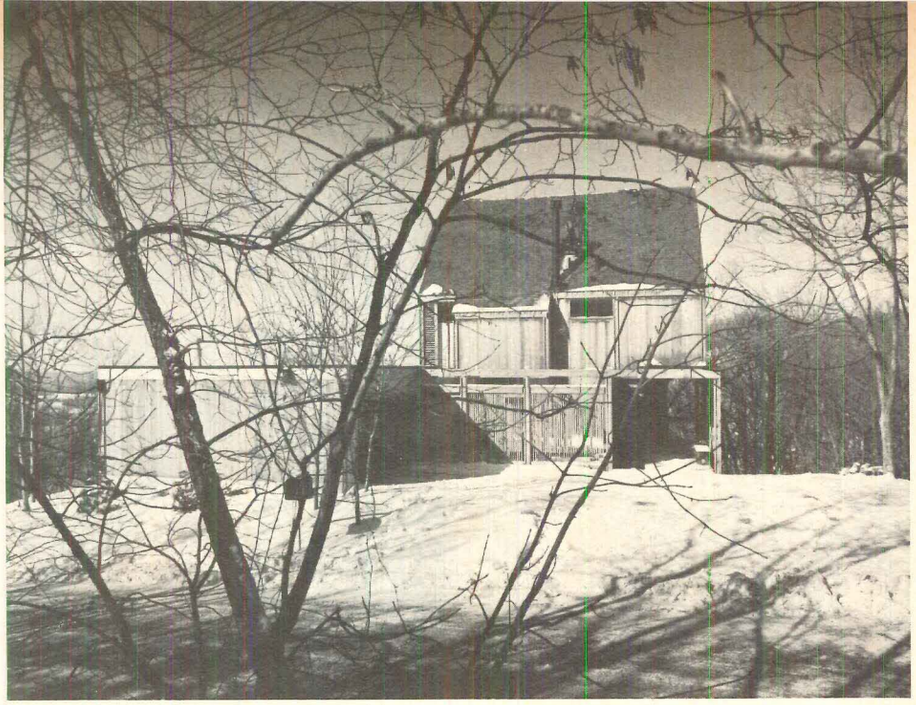
New priorities



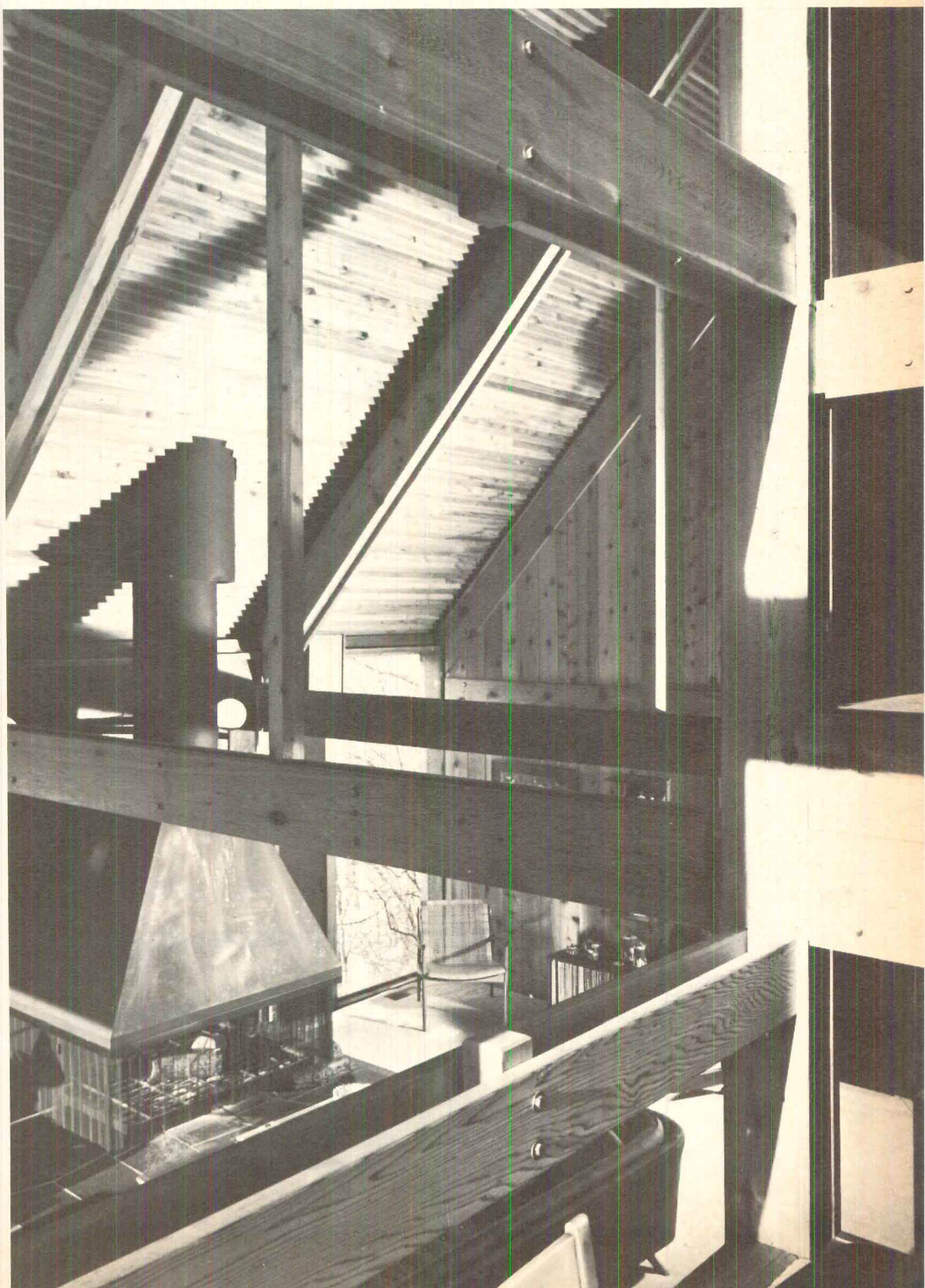
Meeting both site and spatial requirements, design of a wood house is based on a structural cage which defines the volumes that allow for changes in a couple's living patterns

Some couples, reaching the stage in life when their grown children are leaving home, start new hobbies, read more, join more civic organizations or just sit back and replan their activities altogether. Some even build new houses, as a Council Bluffs, Iowa doctor and his wife have just done. Architect Neil Astle was asked to design a house which would play a major part in conforming their surroundings to their new living patterns. But more than that, the project was to be a shared new experience, an interlocking of open planning and vertical spaces, yet a sympathetic place for furniture and objects valued by the family.

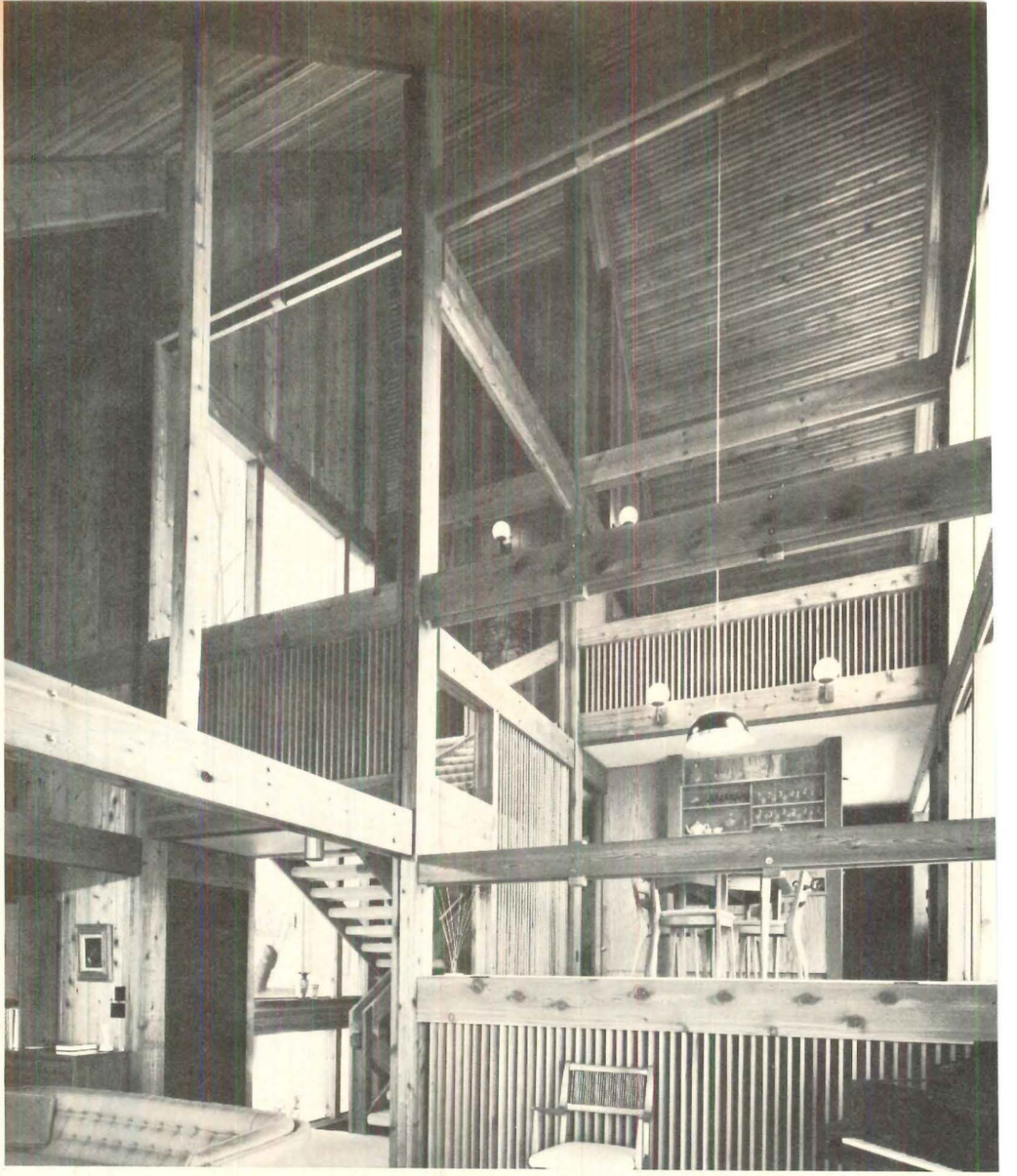
Additional parameters came from the site, a wooded hilltop, with a view of Omaha to the west and extremely limited ac-

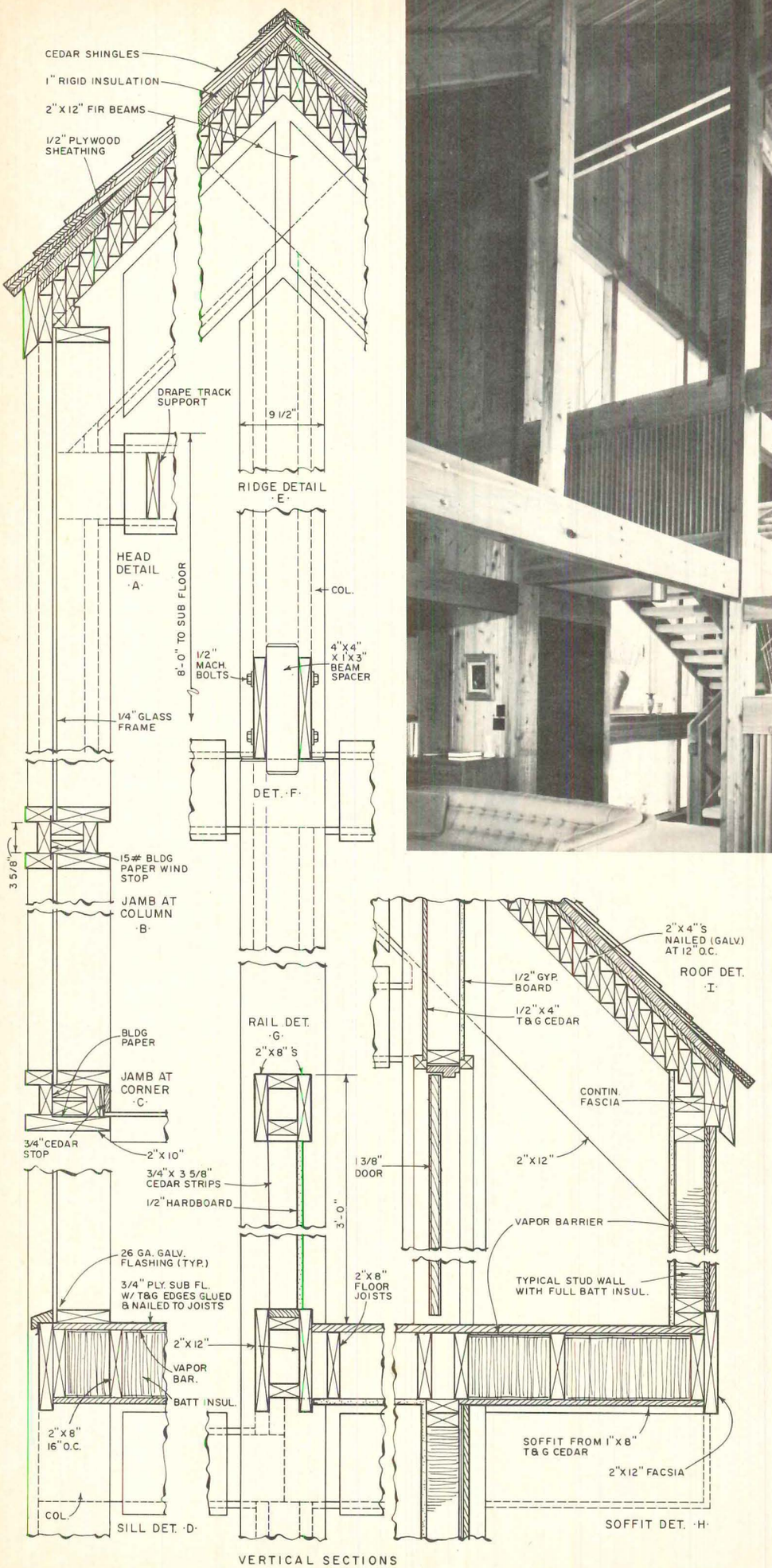






Structural cage is apparent outside the house as well as inside. Because of steeply sloping site conditions (above) and interlocking living spaces (right), a cage was selected to provide support for construction scaffolding as well as defining interior volumes. The nailed 2x4 roof deck spans between members in living areas.

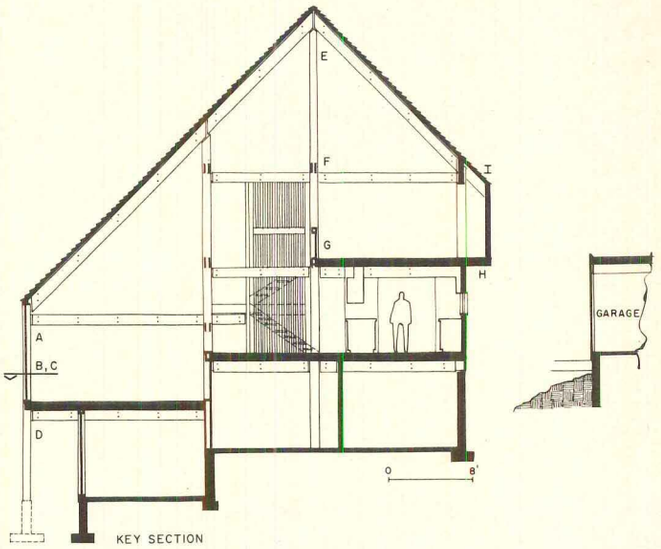




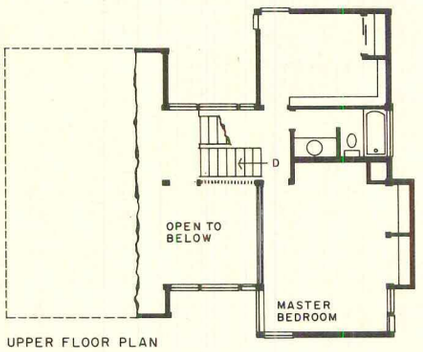
VERTICAL SECTIONS



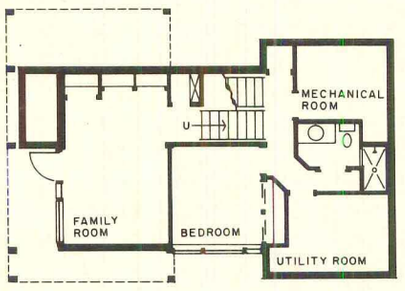
cess on all but the east side. The ravines on three sides gave both privacy and construction problems. The best answer to both site and spatial requirements was a structural wood "cage." Allowing spaces to interlock both vertically and horizontally, the "cage" also became the basis for the construction method, supporting scaffolding as the house progressed. Its most dominant contribution, however, is in the definition of volumes within the main space, which has a height from living room floor to ridge of over 35 ft. The cage does not contain these volumes, but suggests their limits, allowing visual continuity. The strong structural pattern is a constantly changing thing, modifying relationships between spaces as the viewing point changes. Both the structure and the volumes of the house impart a warm barnlike quality, and interior finishes are left natural except for an oil sealer. All walls are rough-sawn western red cedar car siding, and exterior surfaces will be left to weather. Requests for low maintenance applied not only to the house, but the site as well, and it, too, will remain natural. [JM]



KEY SECTION



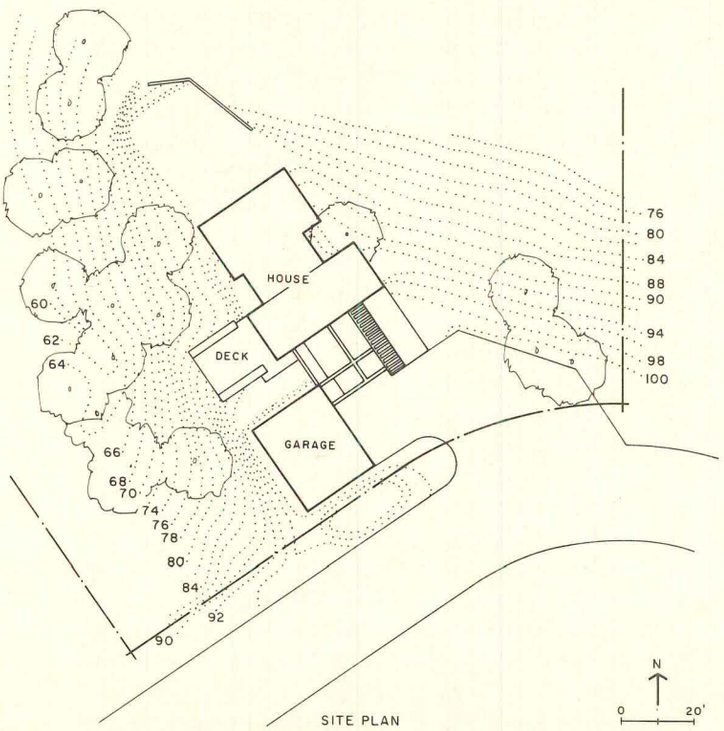
UPPER FLOOR PLAN



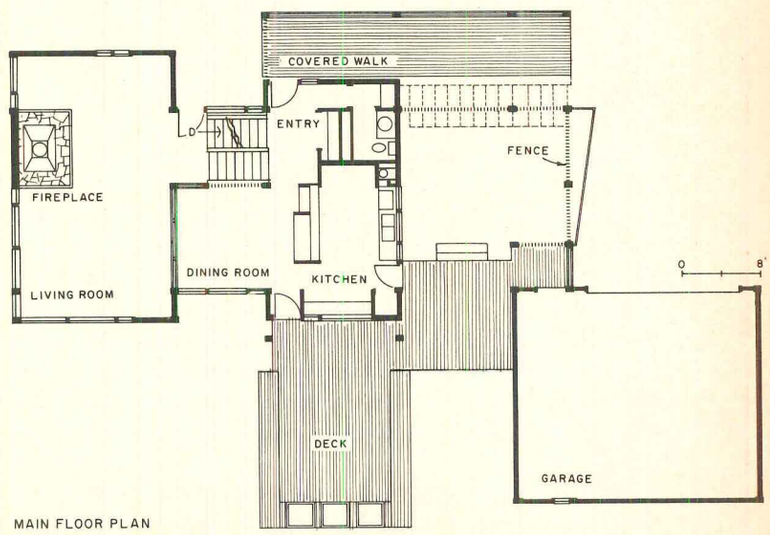
LOWER FLOOR PLAN

Data

Project: residence for Dr. and Mrs. U. John Collignon.
Architect: Neil Astle & Associates.
Site: wooded hilltop in Council Bluffs, Iowa, steep slopes away from the house on three sides.
Structural system: wood structural "cage" braced in two directions, with structural nailed 2x4 roof deck.
Mechanical system: forced warm air.
Major materials: most interior and exterior surfaces are western red cedar, oil sealer inside and natural outside; roof, cedar shingles; floors, carpet and slate.
Costs: $49,000 ($25/sq ft).
Photography: Joel Strasser.



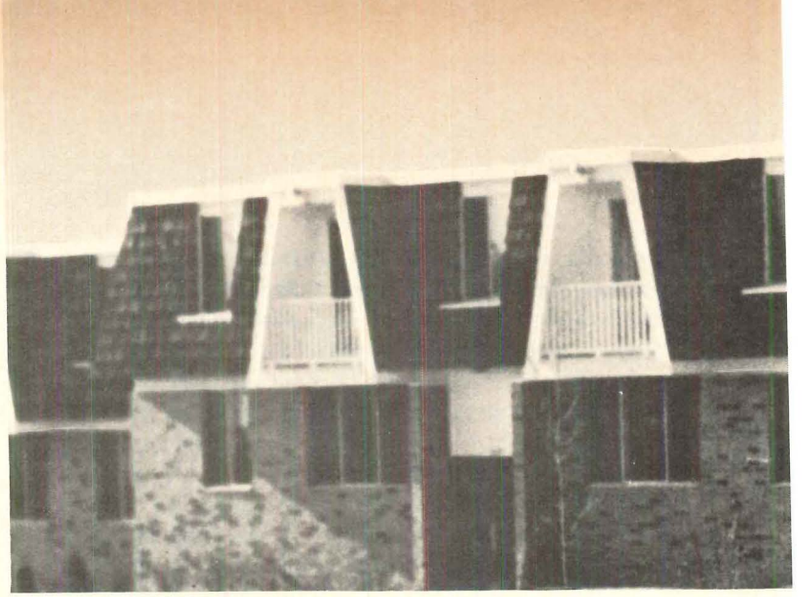
SITE PLAN



MAIN FLOOR PLAN

The church as sponsor for nonprofit housing

Where angels fear to tread



Which of you who is desirous of building a tower, does not sit down first and count the cost, to see if he has the means to complete it? Lest it happen that after he has laid the foundations and is unable to complete it, all who see it shall begin to jeer at him saying, 'This fellow began to build and could not finish.' Luke 14:28–30

Recently some 30 people sat down to count the cost of a 68-unit apartment tower. They listened to actual construction figures posted against budgeted figures, approved change orders, voted to substitute vinyl tile for asbestos in the lobby, listened to a report from the tenant committee that had closed the lists after 300 applications and discussed the number of toilets required by state codes for a day care center to be located on the first floor. They threw sophisticated questions at the treasurer, the architect and the man who would be managing the building.

The agenda might have been routine for any builder/developer. The room, however, was a church lounge and the participants were ministers, housewives, businessmen and office workers. Only one, a gray-haired woman in a bright pink pants suit, had any prior experience in bringing a project to the point of occupancy. The occasion was the annual board meeting of a housing corporation whose members represented the various churches and synagogues of an interfaith council.

This meeting, with or without its celebration of a project about to be occupied, is being duplicated in hundreds of neighborhoods, towns and cities across the country as more and more churches and interfaith groups enter the housing industry at its most precarious level, sponsorship of low-income housing. They organize building corporations despite all reason and logic that point to simpler methods of doing good—tempering charity with love, "witnessing" as Christians or "expressing social concern" as Jews. The motivations are deep and strong—they have to be for a group to operate successfully in an arena choked with racial and political prejudices, time delays that magnify rising costs, and layers of bureaucracy that seem to have been created by the devil himself.

Organized as nonprofit developers, these groups range from ad hoc committees set up especially to build a single project to well-run professional teams that are part of existing institutions. Almost all make use of various federal housing programs that insure mortgages and/or subsidize interest rates. Many acquire their sites through urban renewal. There is little difference between church-oriented and secular groups except that the former tend to back the building program with more social services to the tenants. Nationally, the churches have a long history of caring for and housing the sick, the elderly, students and the indigent, but providing housing for low-income families is a recent, and still-growing, development.

Seed money usually comes from church coffers, but there are sources for borrowing even this. Up front costs are relatively high because expenses pile up during lengthy application processes: funds are tied up in land options (only the most naive groups buy their sites before feasibility is assured), interest on early loans, and professional fees. Lawyers, housing consultants, financial experts and architects must be paid, although architects usually work on letters of intent, deferring fees until later. Under federal programs this money is supposed to be recaptured from the final mortgage, but many groups have found that projects do cost them some of the front money, plus separate financing for extras such as more expensive materials or special social service rooms.

The architect, if he is not careful or if he cares too much, also ends up subsidizing a housing project, warns Anthony Tappé of Boston. He estimates that such housing could be profitable for the architect if more than 200 units are involved at one time, and if negotiations don't drag on too long. But, he adds, there are too many meetings to attend where the architect just cannot bill his principal time.

One of the architect's first problems with a sponsor group and with the bureaucrats who process the papers is breaking through the image barrier of "overdesigning without regard to costs." Many groups or advisors insist that the architect work closely with a contractor chosen by negotiation so that he may benefit from the contractor's "realistic cost inputs." They tend to overlook the fact that most "overdesign" of recent projects is due more to inflation than design.

The last problem, and the one that probably hurts the most, is having the sponsoring group select less-than-capable management people to operate the project. "It was thought by some that our good works would be so appreciated that slow



Oakland Terrace Apartments at Jacksonville, Fla. will have 60 units. Architects are Madison Madison International; as consultant, American Baptist Service Corporation helped secure an $820,000, 221 (d) (3) mortgage.

rent payments, vandalism, bad debts and high repair costs would be of little or no concern," says Rev. Virgil E. Murdock (box, p. 105). "A fallacious assumption. No one loves a landlord, even—or perhaps especially—a church that is also a landlord." He also observes—as does every other experienced sponsor—that construction costs often eat up money which should be set aside for operating and maintenance. There is no such thing as maintenance-free design, no architectural tricks that will prevent wear, tear and vandalism.

The expert's expert

Despite problems, obstacles and risks, the American Baptists are "in it to stay," according to Dr. John Vanderbeck, president of the American Baptist Service Corporation (ABSCO). "You don't quit just because it gets rough." ABSCO is the largest and most active housing consultant in the country, with 338 projects in process at the close of 1971. Of these, only 76 were for family housing, but the proportion is growing rapidly. "It's tough to get sponsors for family housing. The ill and the elderly are much easier to manage."

Set up in 1964 with funds from the denomination's Home Mission Society, the organization is not only self-supporting (although nonprofit) without further use of what are commonly known as mission dollars, but able to take on the technical consultant's task for other denominations as well. ABSCO currently serves the Lutheran Church of America, United Presbyterian Church, Presbyterian Church USA, Christian Church/Disciples of Christ, United Methodist Church, Episcopal Church and the United Church of Christ in an official capacity. In addition, it works with the Center for Applied Research in the Apostolate (Roman Catholic), local Roman Catholic and Jewish congregations.

Services are broken down into 21 processing stages, from initial inquiry and coordination required for the incorporation of the mortgagor corporation to construction, management takeover and final loan closing. Dr. Vanderbeck and his staff at the Valley Forge, Pa. headquarters set policy and give backup support to some 30 field representatives who operate in seven geographical areas.

"Our largest problem is to keep the sponsors on the track," Dr. Vanderbeck says. "They can't understand why time drags, why they can't get answers from the FHA when they need them. The question is how to keep a sponsoring group motivated over so long a time." He sometimes despairs over bureaucracy: "The problem is that all the guidelines aren't known, even to HUD. We get different answers from Washington and from the field offices. What is needed are policy decisions from Washington that can be instituted on the local level."

"Flexibility to move" is his key phrase. "We have to be able to look at the new programs, shift and adapt to be of benefit to the people." He decries the federal habit of instituting one new program after another just because flaws are found in each, feeling that procedures would be improved greatly if the flaws are perfected as they become known instead of becoming an excuse for scrapping an otherwise sound program. The Federals, he feels, might do well to adopt the motto "You don't quit just because it gets rough."

Although openly dedicated to a ministry of creating communities in which persons may find the basic ingredients of the Biblical "abundant life," ABSCO operates in the secular world on an equal footing with other mortgage consultants. Only Dr. Vanderbeck and the vice president/secretary, Rev. Richard J. Hanson, are ordained and have served parish ministries, but all, including these two, are experienced in mortgage banking and other business techniques. They know their way around HUD and the FHA, have been involved with the National Urban Coalition, the National Home Builders Association, the National Housing Partnership Alliance and the International Rural Housing Association, among others.

While ABSCO does become involved in projects financed in part by the syndication of private funds, as well as "pure" nonprofit, it does not automatically take on all groups that seek it out. "We recognize that many local housing groups are put together by a builder or an architect looking for a make-work project," says Dr. Vanderbeck. "This in itself is not wrong, but we look further than the organization, further into the motivation. Sometimes it's not enough."

The devil's advocate

Larry M. Lefkowitz, through his experience at the Nonprofit Housing Center in Washington, takes a dim view of the whole proceeding. "Nonprofit housing is now on the decline," he told P/A. "The FHA has made it clear that it would rather do business with developers, and it is increasingly difficult for nonprofit groups to get through the hoops. Limited participa-

tion (syndication of private funds) has carte blanche and the nonprofits are having a rough time."

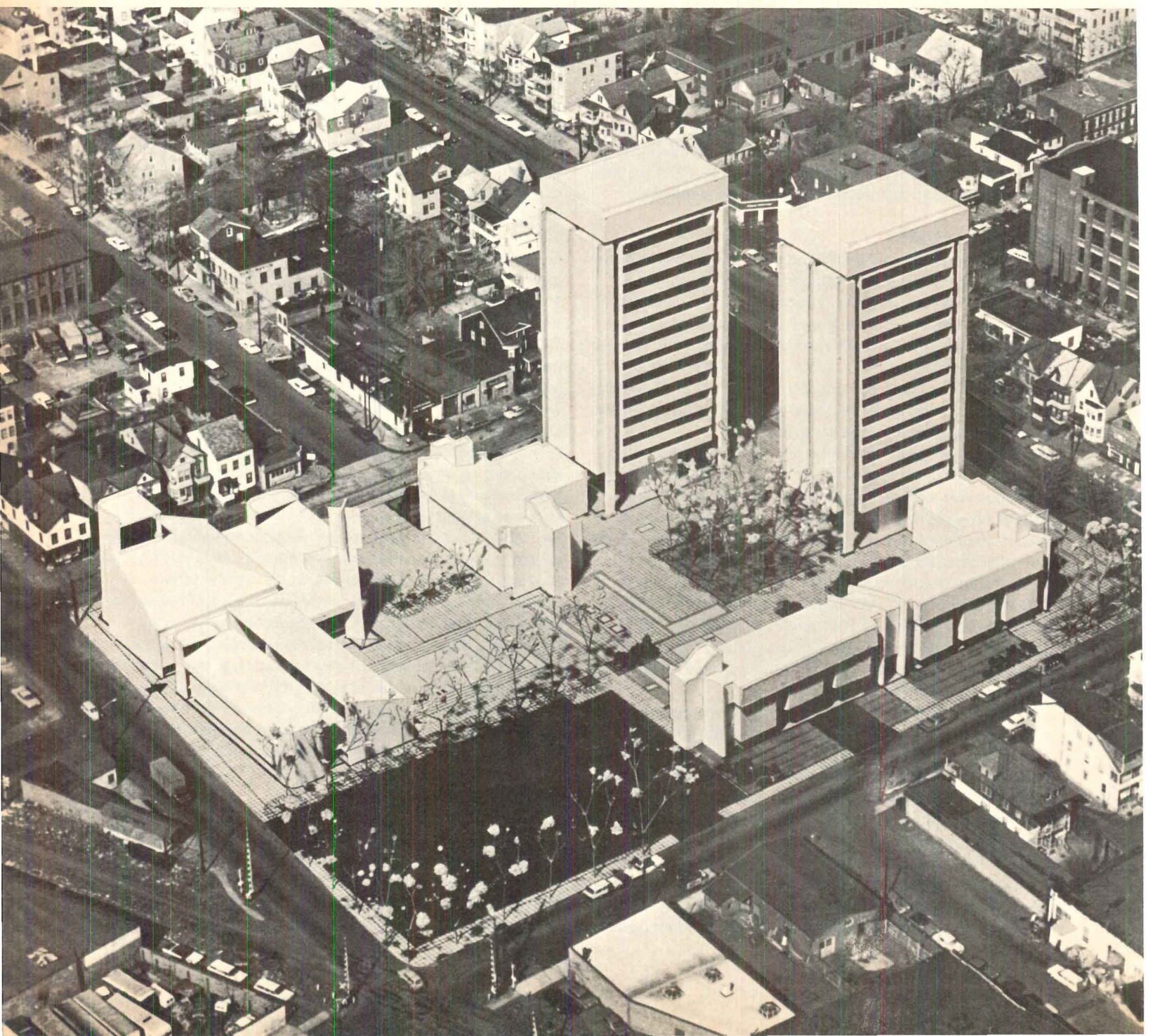
He does approve of the nonprofit groups that take the syndication route: "They take this money and pump it back into social services. Over the last eight years, the nonprofits had built a good percentage of the subsidized housing but in 1971 the proportion was shrinking. The nonprofits must survive by doing business in the syndication world."

The watershed, according to Lefkowitz, was the 1969 tax reform bill that made housing poor people a better tax shelter than citrus, cattle or any other investment. Investors in the 50-70 percent tax bracket are buying up these deals.

An alternative? "The Feds would be better off giving, say, $2.5 million to a church as a gift saying, you build and run it with all our strings attached. The subsidy now paid out for every family (reducing interest from 7 to 1 percent for 40 years) and the initial tax writeoffs will equal five times that original gift for a typical project."

The not-so-cheerful givers

Warnings from experts such as Lefkowitz notwithstanding, the church-sponsored groups continue to multiply. In February the Guild for Religious Architecture sponsored the first of a series of regional seminars on the subject in Boston. Architects and religious-affiliated sponsor types heard a very angry young man keynote the seminar: "All that has been done in public housing has been wrong. What we have had is a constant recycling of billions of dollars with no benefit to the

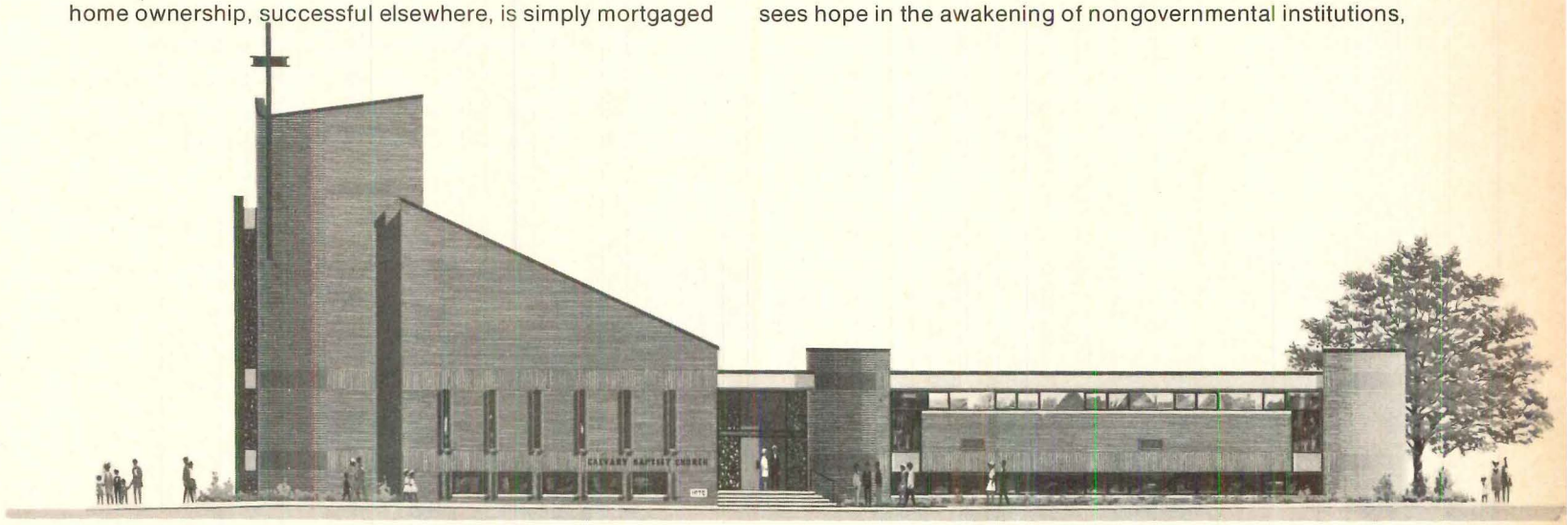


poor," charged Rev. Roland S. Larsen, executive director of Boston's Interfaith Housing Corporation. "The administration—Romney—is talking about reform, but . . . there are about 1500 programs in Washington, pressured by interest groups that represent everybody but the poor."

Rev. Larsen feels that this "public blundering" has led to an extraordinarily high failure rate (some $40 million worth of public and nonprofit projects in Boston alone are now waiting for foreclosure) and Mr. Romney seems to be in line to become the world's largest slumlord.

Speaking to local conditions, he said that Boston's banking and financial leaders have made "virtually no commitment at all to solve these problems" and that the FHA 235 program for home ownership, successful elsewhere, is simply mortgaged too low for New England where land, taxes and heating costs are too high. Builders, real estate interests and bankers benefit more from federal subsidies than do the poor, he continued, more or less consigning the profiteers to the same portion of hell reserved for those who practice "the unbelievable bigotry" in the suburbs.

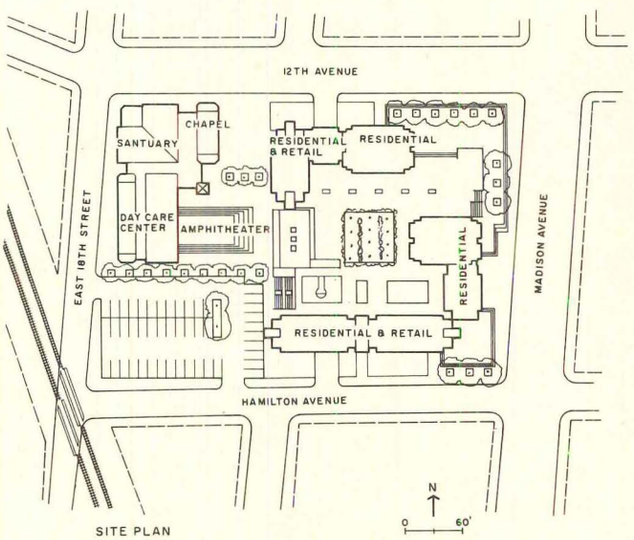
Rev. Larsen, as did others throughout the two-day conference, stressed economic integration: "Welfare people can make significant contributions to the infrastructure of the community." There is great opportunity to build housing, especially for the elderly, on church-owned land in the suburbs, he added. "We need some successful models of economic integration out there." For all his antibureaucratic charges, he sees hope in the awakening of nongovernmental institutions,



Calvary Baptist Church

Calvary Baptist Church is taking a slightly different approach to providing low-income housing, including in it a private self-renewal of its own city block. The first structure will be a new church and day care center, in effect a seven-day community center for parishioners and neighbors. Before 1975, 24 low-rise apartments, two 12-story apartment towers for the elderly and 5000 sq ft of shops will be linked to the church by a raised plaza designed to be the pedestrian hub of the community.

Located in Paterson, N.J., the block will include hard and soft play surfaces, an amphitheater, tree-shaded areas and parking below the plaza. The site is on the edge of the city's former Model Cities Development area which has been curtailed so much that Calvary Baptist's renewal program will stand alone.



SITE PLAN

Data

Project: Calvary Baptist Urban Renewal Project, Paterson, N.J.
Architect: J. Robert Gilchrist & Associates.
Program: replace existing church and provide a full range of spiritual, educational, day care, housing, recreational and fellowship activities.
Site: one city block, deteriorated neighborhood.
Structural system: church, masonry walls, wood beams, arches and roof deck; housing, exposed precast concrete systems of modular components now being developed by the architects.
Mechanical system: church, hot water heat, air conditioning for offices; housing, hot water, fin radiation with individual temperature control, air conditioning for offices and community rooms.
Major materials: church, red brown brick exterior, amber windows; housing, design not completed.
Costs: church and day care center, $480,000, $24/sq ft; residential, commercial and plaza, $3 million.
Consultants: American Baptist Service Corporation, housing; American Baptist Home Mission Societies, church program; H.K. Engineering, mechanical engineering; The Graphics Forum Incorporated, interiors.
Client: Calvary Baptist Church, Paterson, N.J.
Photography: Town and Country Studios.

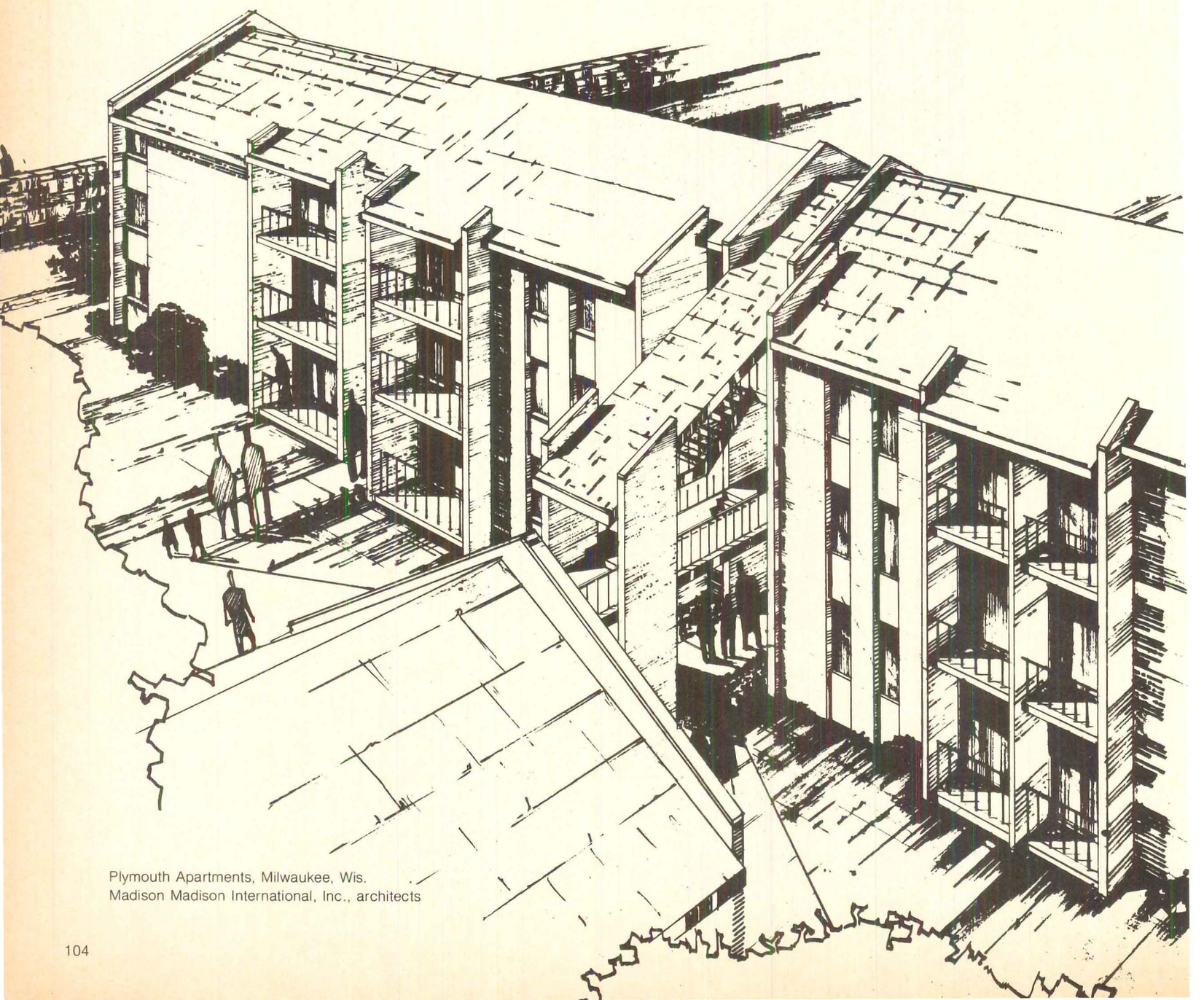
such as churches, to the problem of making man the center of his community. His advice to sponsors: study the bureaucrat's manuals as if you believe them. You have to know his job better than he does to make creative use of the programs.

Working with state funds

William White, director of the Massachusetts Housing Finance Agency, agrees with Rev. Larsen and encourages economic integration in every project. His agency, now drawing attention from many other states because of its freewheeling attitudes and minimum of regulations, operates with a small direct subsidy from Washington but issues bonds to cover the funds it lends for private, public and nonprofit projects. It issues both construction loans and long-term mortgages. Time of processing, in contrast to Washington operations, is only seven months from preliminary application to groundbreaking. The results are unique, White says. "There is public housing, 236 housing and market price housing in every project, and it works. The market rents are the first to be filled, because we insist on a better unit for the money in order to compete with private housing. The payoff is that suburban communities will see that people can live together. They will weigh the advantages against isolated public housing; actually the new way is cheaper. They get tax-free public housing, private efficient management and the opportunity for people to move up without moving out."

White sees little difference between church and private developers. The job of providing housing demands both, and of some $200 million now in housing projects, $60 million is out to church groups. He does see churches being able to play a strong role in changing suburban zoning patterns which, he says, will stop housing from being built if anything will.

He suggested that churches should make use of the National Housing Partnership especially where they need seed money. "Churches ought to be in housing," he told the GRA conference, "because you're all idealists. Bureaucrats need



Plymouth Apartments, Milwaukee, Wis.
Madison Madison International, Inc., architects

to be prodded by idealists. Keep us motivated." He ended on an idealistic note himself: "When more people see what's going on, the stigma will be taken out of low-income housing. When this catches on, we will go into new houses, new communities. We will solve the housing problem."

Charles Speliotis of the Boston Redevelopment Authority is not so sure. Self-described as an "abrasive character," he sees all the various members of the building team—financiers, lawyers, contractors and architects—as being interested only in their own parts of a project, not housing as such. Speliotis believes in turnkey programs, in allowing enough money to carry time delays, in having the contractor furnish constant cost inputs to the architect's design. "The nonprofit sponsor is on delicate grounds, and especially needs an experienced developer."

Both of the Roman Catholic speakers at the GRA conference stressed that the Church should not be a supplier of housing, but should build enough moderate- and low-income housing to "force" society to meet its own responsibilities. The Rev. Michael Groton, director, Planning Office for Urban Affairs, Archdiocese of Boston, says his office will concentrate on church-owned land in the suburbs, but does not want to end owning the housing. He listed five key words to any nonprofit project, which his architect-listeners later agreed applied as much to them as to the sponsoring groups: "Someone on the team must have had the *experience* of going through such a project; *toughness,* because it's a difficult task; *sensitivity* to the people who will live there; *imagination* to find ways to use the programs; *suffering,* as you will."

The Rev. Msgr. William J. Carey, commissioner, Building Commission, Diocese of Providence, R.I., went even further in saying the Church should not be in the business of subsidizing housing. Its responsibilities are to the elderly, he said, describing a successful city-sponsored project downtown and an unsuccessful condominium project done by a foundation called Homes for Hope, Inc. "You just can't build condominiums for the poor," he concluded sadly.

Rev. Murdock, whose Unitarian housing corporation is just now completing two projects in Boston after a five-year struggle, brought up some grave doubts about the future of subsidized housing, especially if HUD and the American people really sit down to add the costs. He cited figures of $2580 subsidy per unit—interest, tax, rent supplement and public housing leasing—and breaking this down to $200 a month, suggested that this, added to the $100 a month a family can really afford, is enough to buy a house in Wellesley or Needham. But he also intends to hang in. "What the future holds in the way of doing this kind of good—faster, better, cheaper, more efficiently—none of us knows. We must go on with the tools we have at hand, while at the same time working and hoping for better tools."

He concluded the conference with a special benediction: "From that unquestioned and unquestionable source of wisdom—a fortune cookie—this admonition: An architect who works with a nonprofit sponsor is like unto the lawyer who defends himself, for it is written that he has a fool for a client. But as doers of good we offer no defense save that from another source, I Corinthians 4:10, where it is written: We are fools for Christ's sake." [RR]

Wheeling and dealing in the vineyards of the Lord

Wheeling and dealing in the vineyards of the Lord is how The Rev. Virgil E. Murdock sums up his experiences as executive director of the Benevolent Fraternity of Unitarian Churches in Boston. As one of the speakers at the conference on churches as sponsors for low-income housing held by the Guild for Religious Architecture he gave this testament:

Genesis. In the beginning Congress, by passing the Housing Act of 1961 and subsequent Acts, created low- and moderate-income housing programs. Nonprofit sponsors and limited-dividend sponsors, created they them. . . . Many people in churches, both clergy and laity, usually without first consulting the Gospel according to Luke, or other Holy Writ, accepted the invitation to become doers of good, at no cost to themselves, as officials in high places assured them they could.

The Benevolent Fraternity of Unitarian Churches, which had gone about doing good in all the years since A.D. 1826, decided that their method of doing good was seen to be neither very useful nor very necessary. I looked many months for new ways of doing good, and lo, messengers from the Federal Housing Administration and the Boston Redevelopment Authority came to me, as in a dream, and said to me: "Why not build places of habitation for the poor?" But I replied, "We are a small group of men and women, with many preachers among us, who have operated settlement houses and neighborhood centers, who have ministered to students, the elderly, the sick and the poor. How can we be reborn in an instant to be hewers of wood and layers of brick?"

They took me to a high hill overlooking the city and showed me how such great transformation could take place, and at *no* cost to us at all. "Land," they said, "we will sell to you at a very low price. At great cost to ourselves we will acquire two whole city blocks, demolish the buildings thereon, and sell it to you at a minimal price." This miracle they called "Urban Renewal."

"Money," they said, "we will lend to you for only 3 percent interest (later lowered to only 1 percent). Enough we will lend you not only to buy the land and build the buildings but even, yet 2 percent more to help you put the project into operation." The first of these miracles they called "below-market rate interest" and the latter one they called "AMPO" (amount to make project operational).

"Taxes," they said, "will be lowered to only 15 percent of the gross income of the project and during construction you will pay even less." This miracle, in Massachusetts, is called a "121 a charter" by some, and by others a tax deal.

And then, miracle of miracles, they said: "If, even after a land subsidy, an interest subsidy and a tax subsidy, the rents are still too high for some people, we will subsidize their rents directly by paying you a part of their rent each month." And these additional miracles they called "public housing leasing" and "rent supplement payments." Truly it was too much for one man and one institution to withstand. Why, certainly here was a way in which we could do great good, at no expense to ourselves, and perhaps, if the buildings stood for 40 years, leave a legacy of valuable real estate to future generations.

Church-sponsored housing

Closer to home



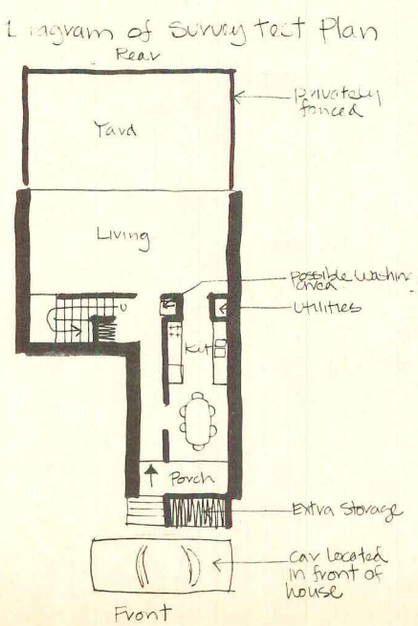
Putting away preconceptions about styles of living may be difficult, since many minds wear blinders. A limited study of user needs led to more suitable housing for one group

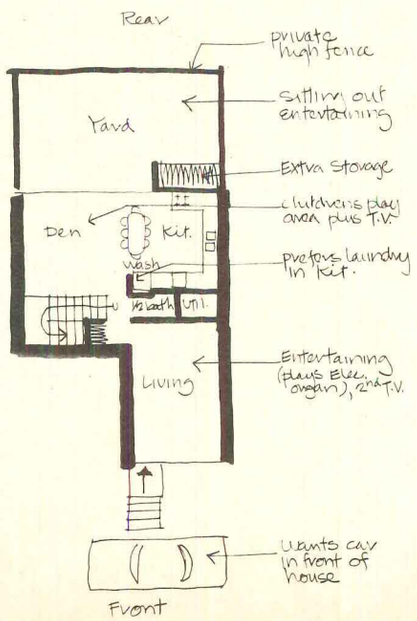
The term "user needs study," like "systems," can imply any number of approaches ranging from years of research to a sampling. Hand-in-hand with this effort goes the concept of feedback, or learning by the success or failure of accomplished design assumptions. Of architects that concur with the need for more information about the real user, there are those who feel that a) not enough definitive data is available, b) they cannot afford the time and/or money to learn, c) what they could do wouldn't matter, or d) none of the above.

Louis Sauer describes himself as "an architect trying to identify who the user is, and how the architecture should be changed for a different lifestyle." Two church-sponsored housing projects provided a vehicle. As described in (P/A, May 1971, p. 106), Sauer, with New Haven Redevelopment Agency aid, undertook a limited study to provide some answers. Faced with redesign on Harmony House, he saw the opportunity to interview potential users to determine their thoughts about their own housing. Admittedly small in scope (six families), this study represents a course of action advocated by other voices in the profession besides Sauer's, in that whenever firsthand preferences can be learned, they are inevitably better than translations. In addition, it marks a determined effort to differentiate between the architect's and the user's points of view.

One of the specific items indicated by the study stressed the need for open, informal and larger kitchen-dining spaces, since that area serves as the focus of most activities. The living area would be a separate place, usually for adult entertaining, and could be used along with the kitchen-dining space for larger gatherings. Another apparent need was for privacy, both personal and family. While there is much interaction between neighbors and a strong sense of community life, most family members recall being overcrowded. Preferring more small bedrooms over fewer large ones, the family also rejects shared facilities other than childrens' play areas. Private yards and nearly public porches were requested, as was parking space in front of the house. The porches were sacrificed for additional inside spaces.



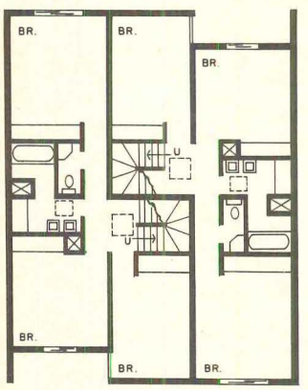




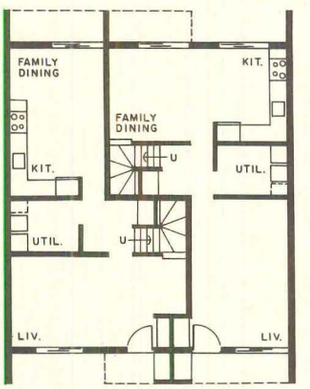
Several of the main points either discovered or confirmed by the six-family study appear in the photo of Harmony House (above) and schematic floor plans before (far left) and after (left) the survey. Preferences about location of the family car and play space, and of social areas were worked into the design through the study.



Harmony House (above and bottom) was the first of the projects to be occupied, and experiences from it were used to revise some of the design decisions on Canterbury Gardens. Plans (below) were typical of both projects, but small alterations on Canterbury added a half bath and changed fencing.

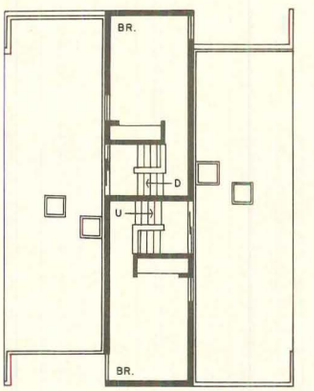


SECOND FLOOR
A&B UNITS

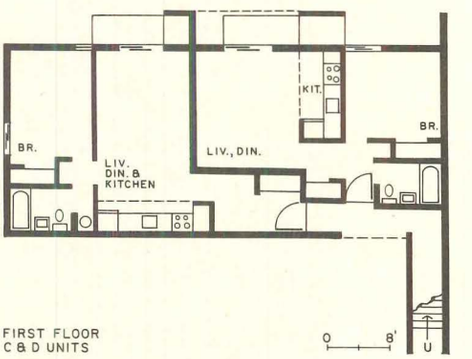


FIRST FLOOR
A&B UNITS

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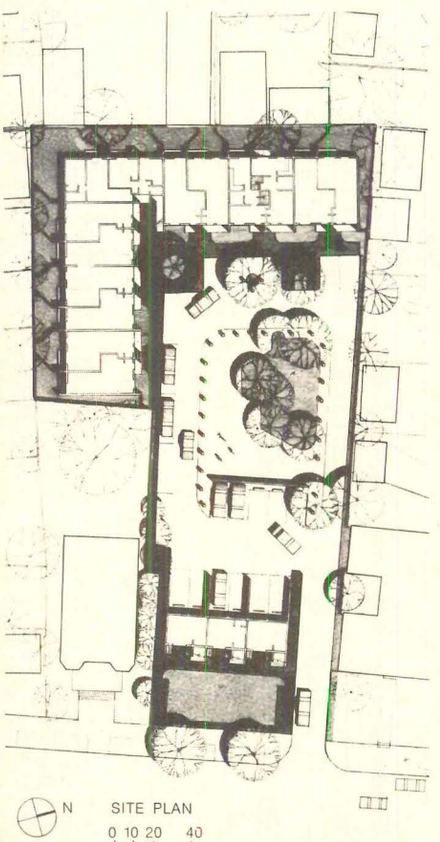


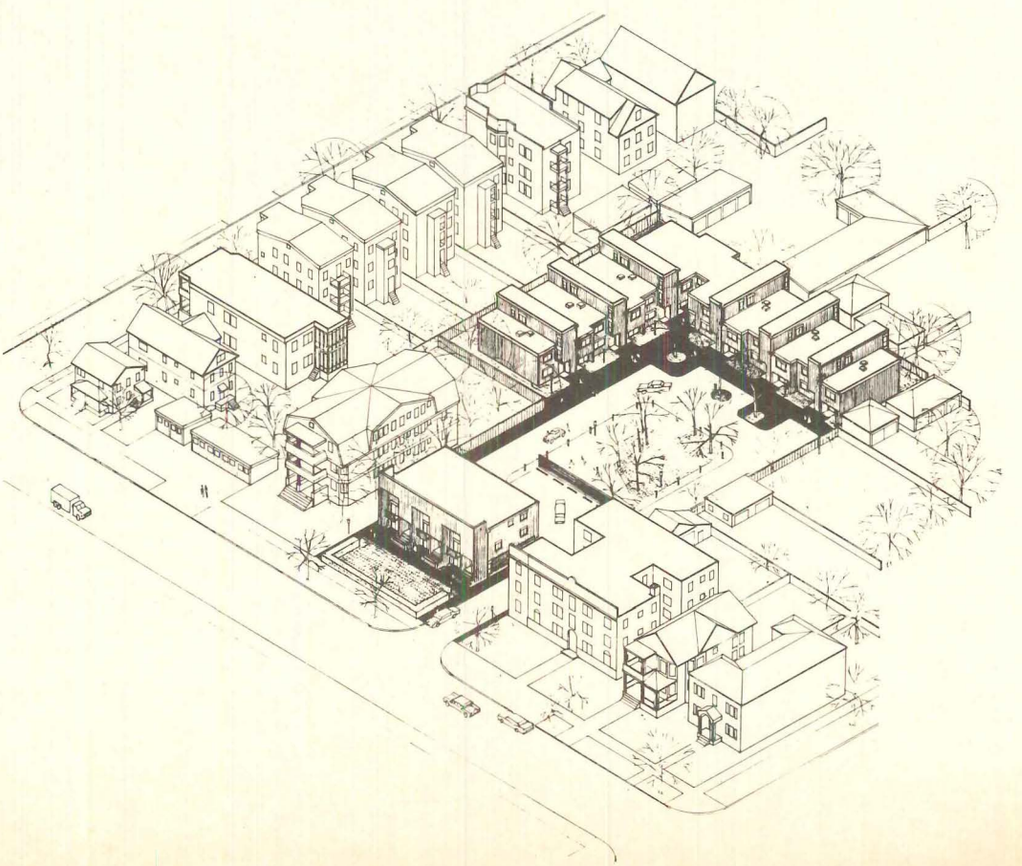
THIRD FLOOR
A&B UNITS



FIRST FLOOR
C&D UNITS

0 8'

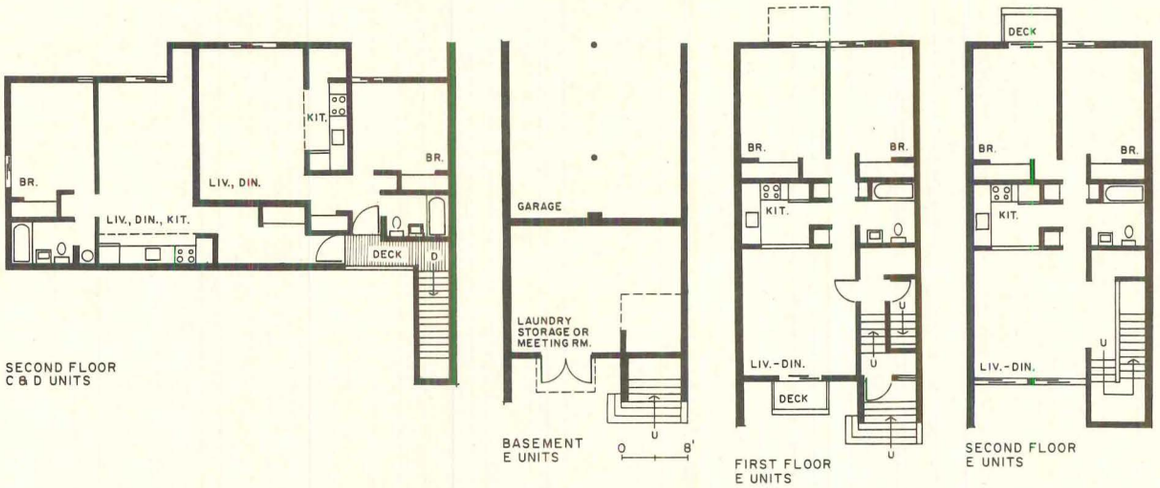


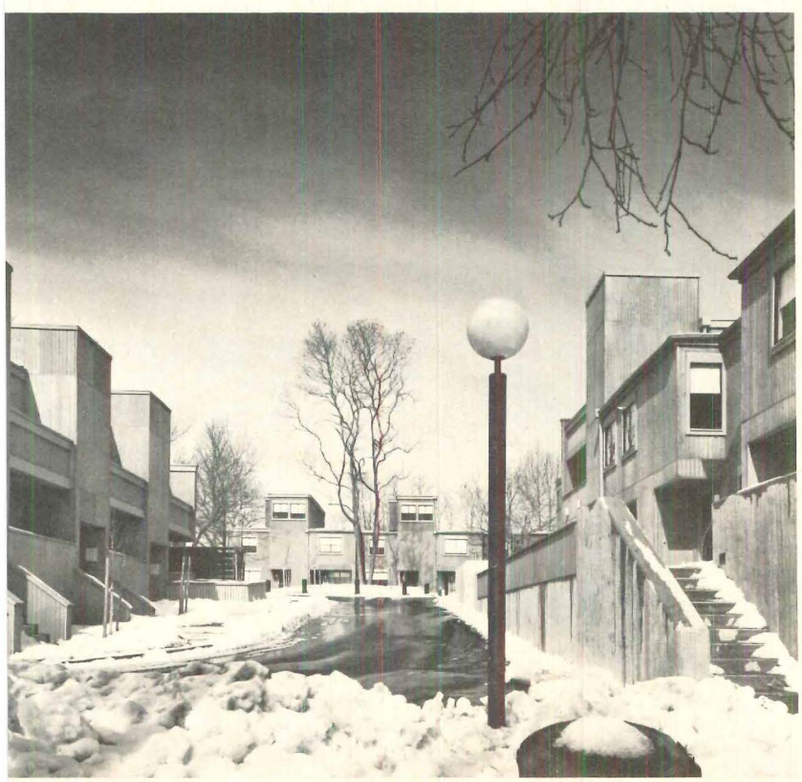


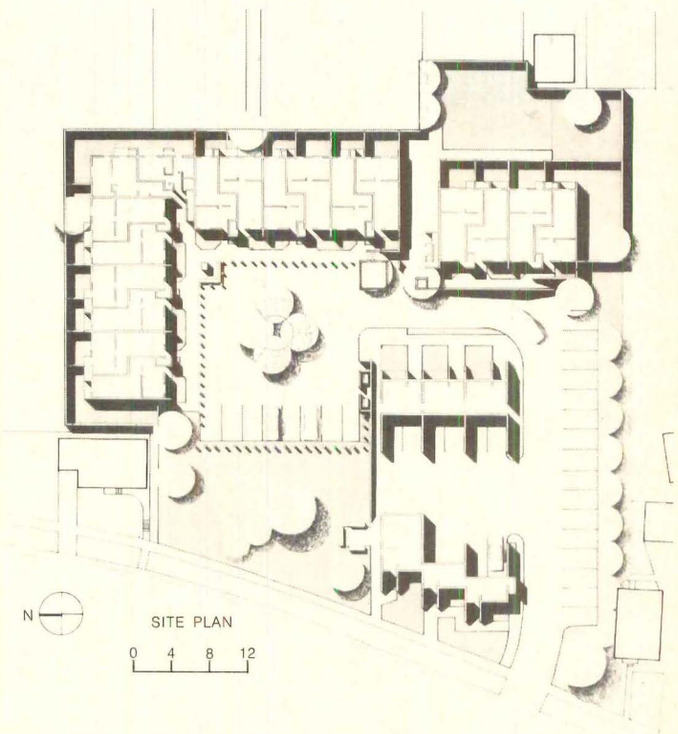
The argument for out-front parking, pressed by the architect in lieu of a formula favored by the city planners, caused a few strong words. Asked to put the cars under the buildings and grass in front, Sauer pointed out study findings showing the importance of the car and the failure of "middle class grass" to maintain its aplomb under heavy use. The effects, he felt, would be stripped cars in dark secluded parking areas and mud in play areas. He won, at least on Harmony House, but only after offering to resign the commission. Harmony House was sponsored by Temple Beth Israel, and developed by the New Haven Redevelopment Agency, financed under the 221(d)(3) program. Another project, Canterbury Gardens, was initiated at the same time (May 1967) and the two were developed together, using essentially the same plan. Canterbury Gardens was sponsored by the Parish Church of St. Luke, Episcopal, with government 236 financing, and construction did not begin until about five months after Harmony House. This time gap is misleading, however, because the Harmony House schedule was delayed by a contractor withdrawal and by redesign.

Both plans feature interlocked units, giving larger room dimensions while keeping spans under 12 ft. The survey brought in an additional half bath as well as the large kitchen-family-dining area. Canterbury Gardens also incorporated a few things learned from Harmony House, most of which are surface changes. Two items emerged which Sauer feels were "dumb mistakes," namely, flat paint on interiors and single color exteriors. Sauer sees these as middle class architectural ethics, not responsive to the specific situation. At Canterbury, therefore, there are three basic wall colors, two trim colors and four bright door colors. Other lessons, both positive and negative, came from the study and from bouts with government agencies.

From the outset, there was the inevitable bottleneck of



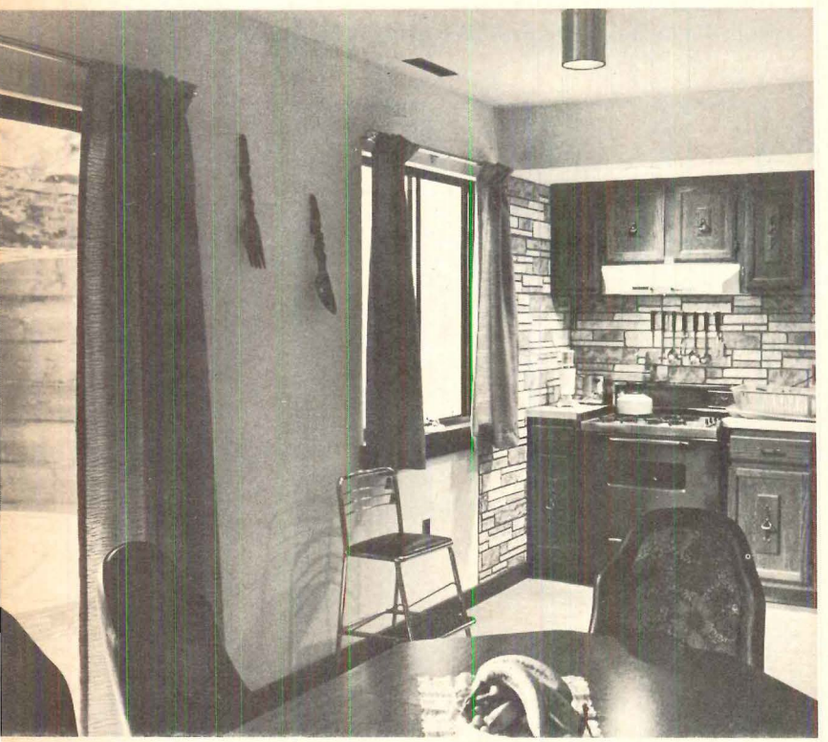


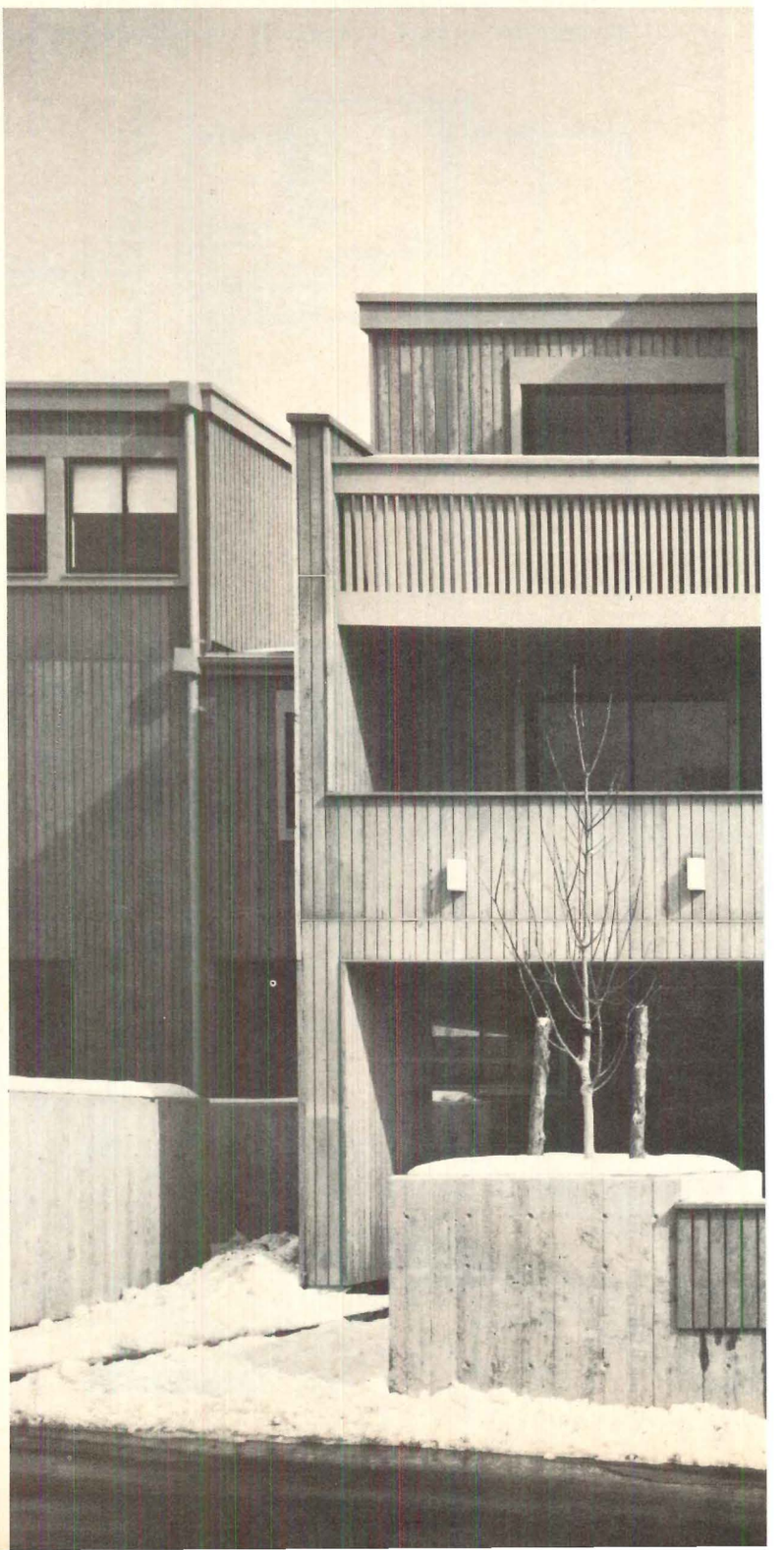


Canterbury Gardens (left and above) is located three miles from the other project, but site and surface changes give a somewhat different character.

dealing with government agencies. Although he feels that his church is competent to sponsor other projects, Father I. Seaman Williams of the parish of St. Luke is apprehensive about the existence of any real government concern. Often compounding that, says Sauer, is the agency or commission man who, though he has architectural training, is more rigid in approach than the architect with day-to-day involvement. This kind of stalemate can cause long delays, as in the parking proposal at Canterbury Gardens. In this case, the result was a compromise. Although few cars are in the tucked-away areas that the city asked for, few are actually in front of the house either. Thus, neither the architect's user needs program nor the visual dream of the planners has been fully served.

Another weak link is in the provision of adequate maintenance, since few sophisticated management companies are available to handle small projects. Without adequate maintenance (and rent collection), original intent can disappear under problems. Many such problems that have surfaced at Harmony House could be countered by maintenance, Sauer feels. Stuffed toilets, broken lights, debris-filled washing machines and loose garbage and trash all have a well-known cumulative effect: less maintenance leads to less personal pride





Many residents have bought new furniture, and some have added imitation stone (above) and other individual touches to further personalize spaces.

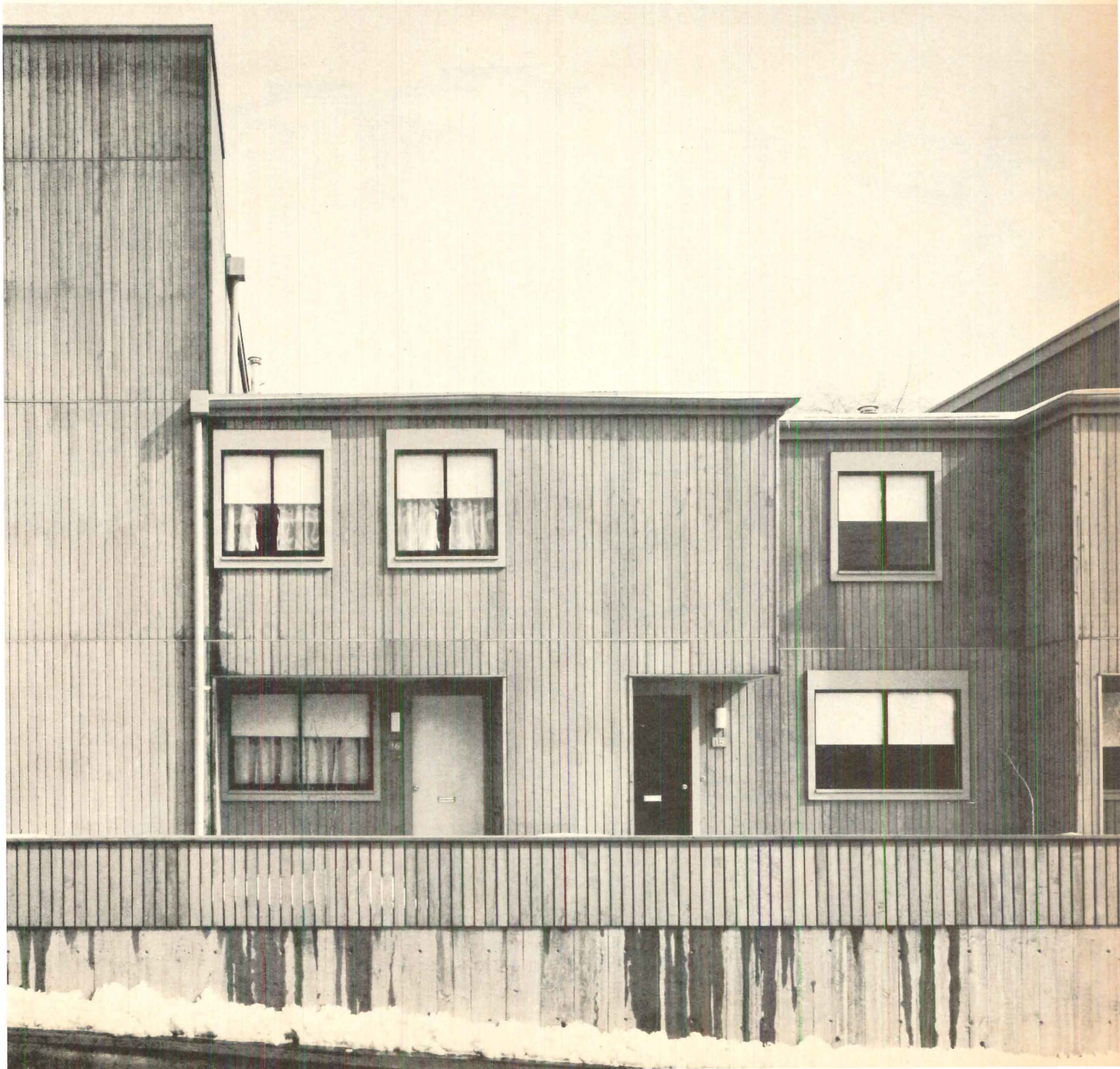
Data

Project: Harmony House and Canterbury Gardens, two housing projects for the New Haven Redevelopment Agency, New Haven, Conn.
Architects: Louis Sauer Associates.
Site: Harmony House, 1-acre urban renewal site in a residential neighborhood; Canterbury Gardens, 1½-acre hilly urban renewal site in a residential neighborhood.
Program: housing groups to be financed under government 236 (Canterbury) and 221(d)(3) (Harmony House) funding.
Structural system: wood frame, concrete block fire separation walls.
Mechanical system: gas-fired forced air.
Major materials: exterior, plywood panel (textured cedar) with wood trim; interior, gypsum board walls and concrete block fire separation walls, vinyl asbestos tile on floors.
Costs: Harmony House, $503,000 ($18.60/sq ft); Canterbury Gardens, $846,500 ($18.40/sq ft).
Consultants: structural, Joseph L. Hoffmann & Associates; mechanical and electrical, Ceglia Associates; landscape architect (Canterbury Gardens), Robert Gregan, New Haven Redevelopment Agency.
Photography: David Hirsch.

and that leads to less involvement in the environment.

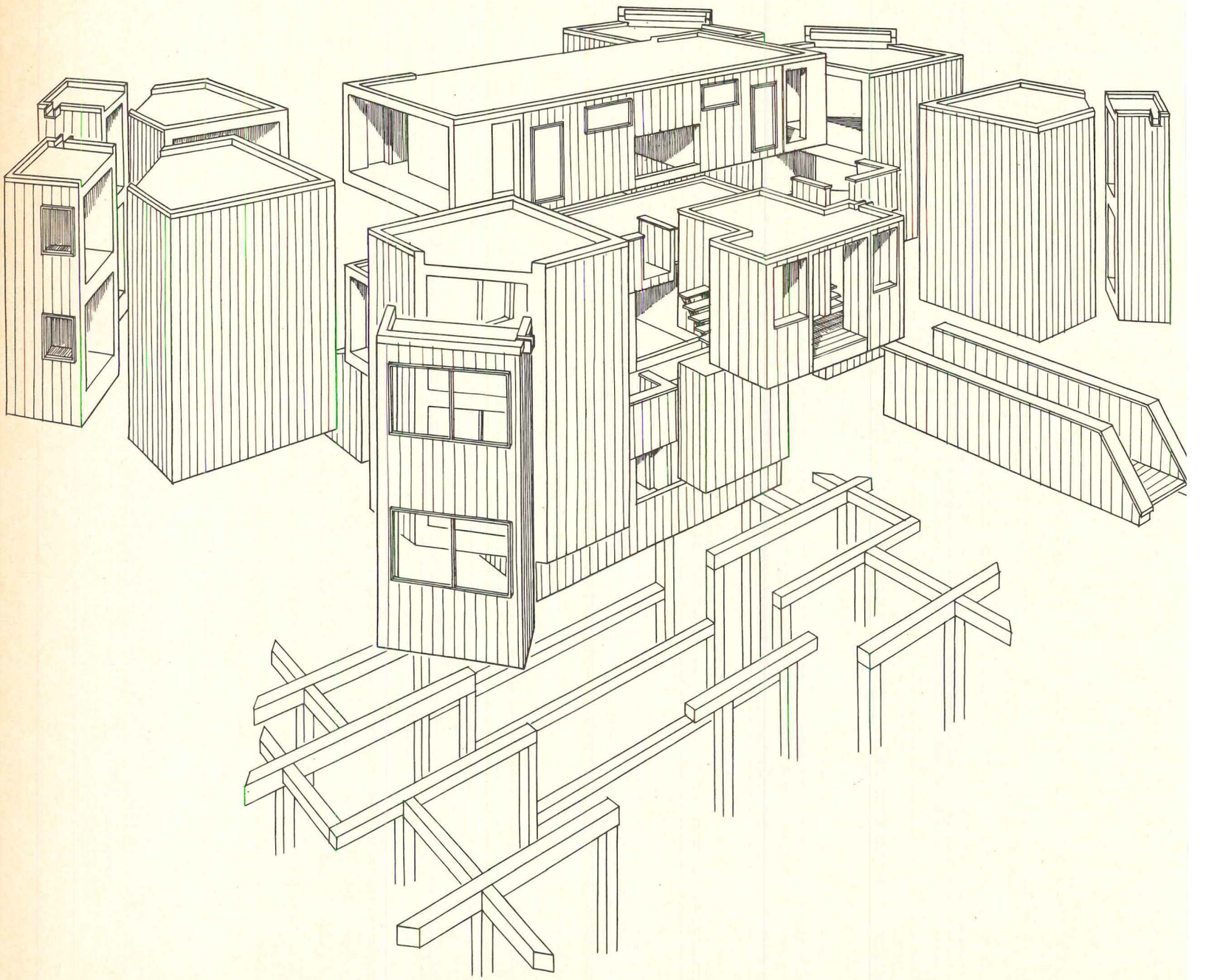
Despite the setbacks and hurdles which impede projects such as Harmony House and Canterbury Gardens, there have been gains as well. Architect Sauer feels that, through the study, the major activity areas of the units have been altered to more closely respond to living styles of the occupants. James Drazen, director of housing development at the New Haven Redevelopment Agency, says that in these two projects New Haven has been given the best government-assisted housing he is aware of. Both Drazen and Steve Whetstone of NHRA feel that Sauer has combined a money-stretching ability, a feeling for materials, organization of space and a facility for working with the contractor, to produce housing with an imagery the residents can identify with. The builder, Kapetan, Inc., was also singled out for praise by the architect, the sponsor and the NHRA.

Working on a contract from the Bureau of Community Environmental Management of the Public Health Service, Sauer will soon begin a feedback study. Aimed at the user (occupant) of the two completed projects, the study will check criteria for the original survey, refine those techniques and, generally, gain input for the next time. [JM]



Bard College modular dormitories

Living high at Bard



A small college in upstate New York, pressed for new dormitories, has found an alternative to conventional student housing that expresses and suits current lifestyles

When Bard College revealed its original proposal for a new dormitory, the students reviewed the scheme with little enthusiasm. They felt that the traditional, institutional scale of the building and its conventional plan were not sympathetic to the way students prefer to live today. They were also unhappy about siting the building in an open field, and suggested that perhaps another site could be found. The college officials, it turned out, were not completely in favor of the scheme either. The proposed, traditional building lacked flexibility and its lengthy design/construction time assured that costs would escalate before it could be finished.

The college officials presented their problems to the architectural firm of James Baker & Peter Blake, who saw a good opportunity to devise a new alternative to the traditional concept of student housing. Because whatever would be built had to be capable of very fast erection—in order to keep down construction costs and to meet the school's immediate housing needs—the architects suggested using a modular system. They also proposed building several small "houses" to avoid the institutional aspect of a single, large-scale building. The school liked their ideas, and when HUD learned of the innovative concept, they agreed to fund most of the costs.

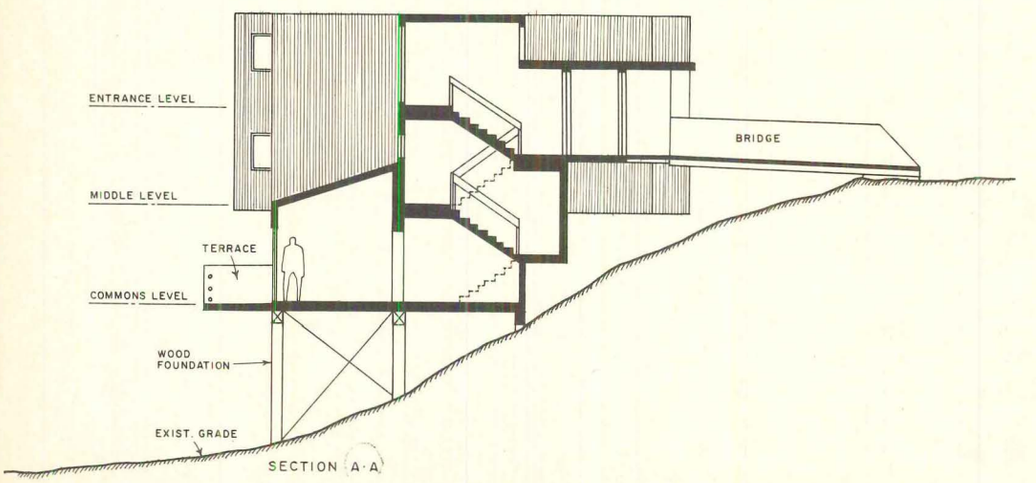
With the architects working in close cooperation with the college officials and students, it was agreed, in recognition of the new student lifestyle, that all rooms would be single and that the new dormitories should be coeducational. The single rooms were to be flexible in plan so they could be joined together to form apartments, if desired in the future. The committee also selected a new site in a wooded part of the campus overlooking a ravine that allowed the college to make use of some otherwise unusable land while not destroying the open quality of the adjacent campus fields. The size and exact location of each unit, however, was to be determined later on the basis of feasibility studies. In the architects' final plan, seven separate residential units have been carefully sited to preserve trees and to give private views into the woods.

Through its combination of both vertical and horizontal components, the wood-frame modular system provides a richness of form that is unusual in modular construction. Each building houses 12 students in single rooms, with six rooms on each of the two living floors. Each entryway serves only three rooms, which will accommodate their later conversion into apartments, if needed. To avoid the boxy look of most modular construction, the architects made several intensive studies to devise an irregularly shaped room that would add character to the living spaces. They also developed a flexible, modular furnishing system with units that can be positioned at the student's discretion on predrilled, overlaid plywood walls. All of the rooms were left unpainted, however, so that the students could choose their own colors from a selection of paints provided by the contractor.

Under the two living floors are a common lounge and kitchenette, a laundry and storage room; this lower floor extends to form an outdoor terrace overlooking the wooded ravine. Because the units are located in the woods, and because very few trees were removed, it was not necessary to provide air conditioning.







Legend

Plans, right:

1 entrance bridge
2 mud room
3 fire stair
4 deck
5 bedroom
6 shower
7 lavatory
8 deck
9 storage
10 laundry
11 kitchen
12 common room
13 deck

Living high at Bard

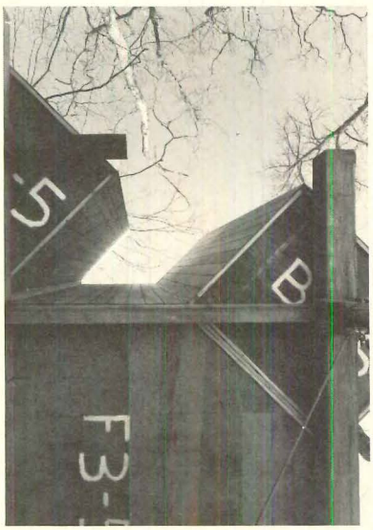
To speed erection time, all components were fabricated in two plants, trucked to the site and quickly erected on treated wood pole foundations. With their system, Baker and Blake were able to have all seven dwelling units completed in the incredibly short time of only 3½ months after the contract was signed. Actual construction took only eight weeks. [DM]

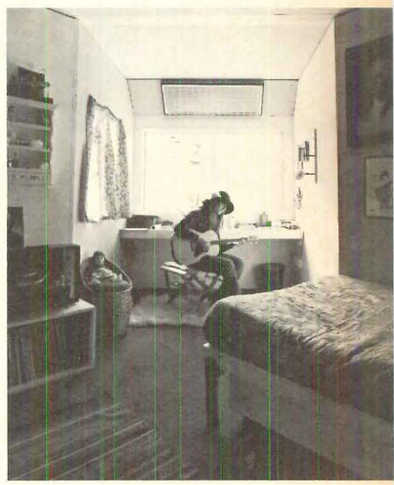
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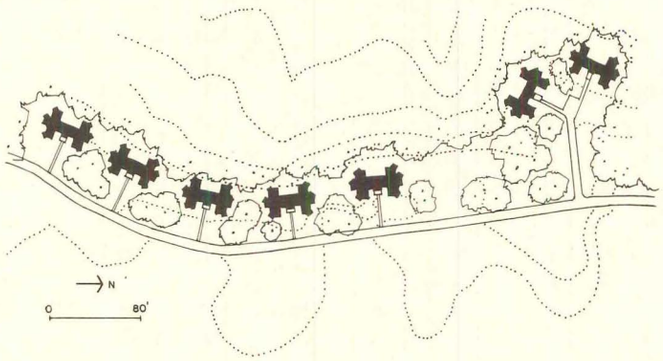
Project: Bard College Modular Dormitories, Bard College, Annandale-on-Hudson, N.Y.
Architect: James Baker & Peter Blake, Architects; Alexander Grinnell, project manager; Alexander Wade, construction manager; Stephen Goldmark, designer.
Manufacturer: Starrett Modular Construction.
Program: to design an alternative to conventional, inflexible, institutional student housing, which could take advantage of cheaper and faster modular construction, with groups of single rooms convertible to apartments.
Site: on the crest of a wooded hill overlooking a deep ravine.
Structural system: pressure treated wood poles in concrete footings topped by heavy timber cross caps supporting wood frame, cedar clad modular units.
Mechanical system: electric radiant heat panels above windows, individually controlled.
Major materials: wood frame and cladding; plywood interior walls, carpet over plywood floors.
Costs: $670,000 construction costs; $23/sq ft.
Consultants: Flack & Kurtz, mechanical; Soldas Sillman, structural.
Client: Bard College, Annandale-on-Hudson, N.Y.
Photography: Nathaniel Lieberman.

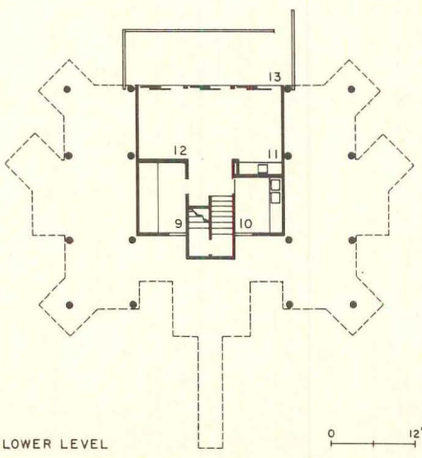


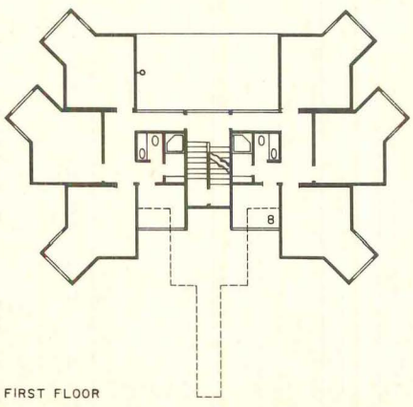
Standing high on wood pole foundations, the Bard College Modular Dormitories overlook a deeply wooded ravine, left. Sited just over the hill's crest, each of the seven units is entered by a bridge, above. Basic furniture units can be arranged as desired on predrilled walls.

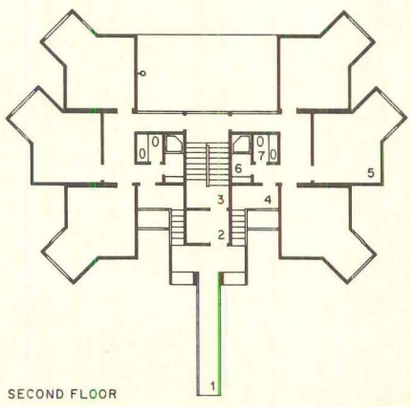












Rogers residence and guest house

A new system in Wimbledon



A sleek, industrialized house in an older suburb of London is designed to use up-to-the-minute materials that save on costs as well as on construction time

Wimbledon, England, is famous for tennis courts and charming 19th-Century cottages set among beautiful English gardens. It is the last place one would expect to find a super-sleek house made of the newest industrialized materials, built with the latest industrialized techniques.

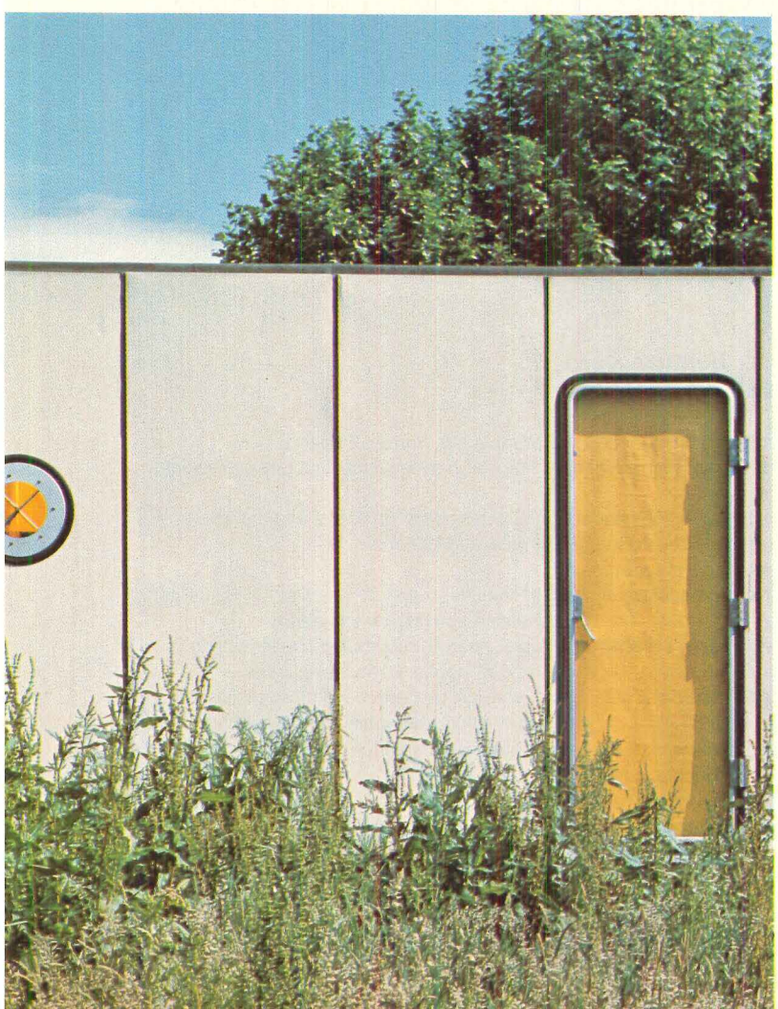
The house, designed by architects Richard and Su Rogers in association with Design Research Unit, is a prototype unit of a housing system being developed for single- and multiple-unit assembly, for a wide range of social and economic conditions. The criteria for the system were that the units be flexible to accommodate any future changes of family size or ownership, that the individual units have privacy, be of low cost, capable of rapid erection, require minimum maintenance and interfere with the site as little as possible.

In building the prototype, time and cost limitations ruled out traditional craft techniques and wet trades, requiring the architects to make full use of industrialized techniques and materials; they used skilled installation teams, and long-life materials with factory applied finishes.

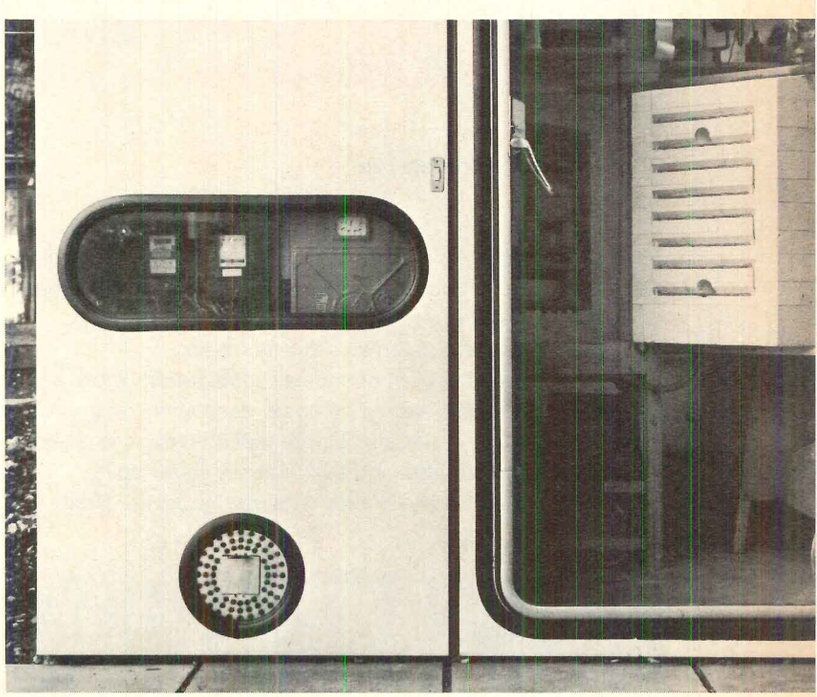
The house and guesthouse-carport are constructed of eight 14″ x 6¾″ rigid steel bents spanning 45′ at 11′-6″ centers. For the thin envelope, the roof is composed of high-load roofing membrane over channel-reinforced, wood-wool slabs. The walls of both units are made of 2-in.-thick aluminum-faced, polyurethane-cored panels, with neoprene zip jointing system, finished inside and out with polyvinyl chloride. The entire east and west elevations of the house are glazed with 8′ x 9′ sliding, double-paned units; on the north and south sides of the house, aluminum framed, glazed bus doors and other glazed openings are set into the panels and neoprene zipped. Over the bathrooms and over the guesthouse kitchen, there are full width, neoprene-zipped, solar-reflecting glazed roofs. There is a heated, suspended plaster ceiling in the house, and a stretched plastic membrane ceiling in the guesthouse.

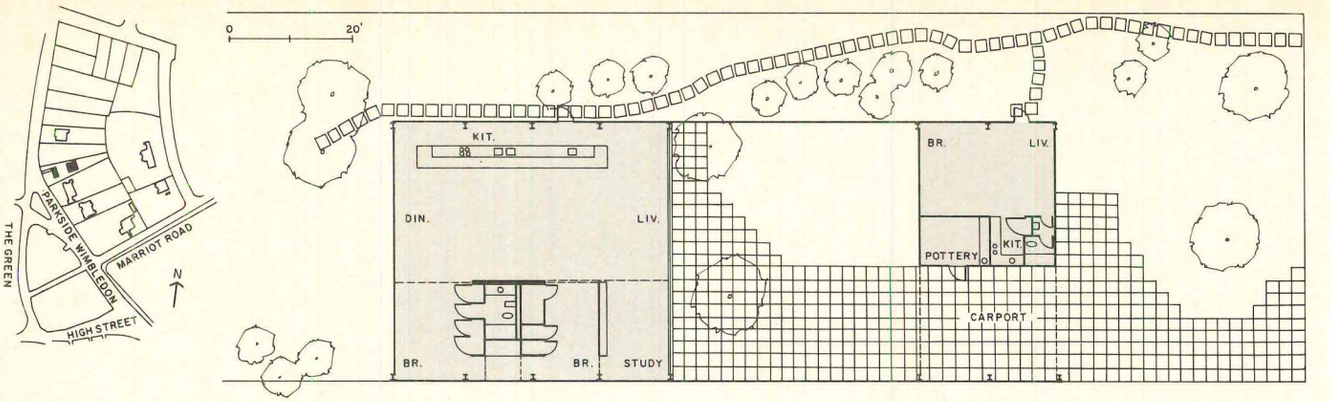
In the cool, spacious interior, all partitions are prefabricated, gloss-painted joinery units, and all walls facing the living room slide open, while the partitions between rooms are removable. Throughout the house and guesthouse, a white





Guesthouse and carport of Rogers house, above, are framed with 3 steel bents; main house, beyond, is framed with 5 steel bents of same size. Bus doors and other openings, below, are neoprene-zipped into aluminum side sandwich panels. Front door, far left, is an 8′ x 9′ sliding glass panel.







A new system in Wimbledon

polyurethane, self-leveling flooring system is used. To accent the crisp, white structures, the steel work, blinds and kitchen counters are painted yellow while, in contrast, the sliding room partitions are painted a vivid lime green.

This prototype unit was, of course, considerably more expensive than the units would be under assembly-line production. That should not negate its potential, however, as a technologically sophisticated and aesthetically superlative response to the question of industrialized housing. [DM]



Data

Project: Dr. Rogers House, Wimbledon, Surrey, England.
Architects: Richard and Su Rogers, in association with Design Research Unit.
Program: an industrialized housing system for single- and multiple-unit use with wide social and technical applications.
Site: wooded suburban lot.
Structural system: eight rigid steel bents spanning 45′ at 11′-6″ centers, clad with industrialized materials and double-paned glass.
Mechanical system: small-bore, heated, suspended plaster ceiling in house, convector radiators in guest house, flush ceiling lights.
Major materials: steel bents, channel reinforced wood-wool slab roof, suspended plaster ceiling, 2-in.-thick aluminum faced polyurethane cored wall panels with neoprene zip jointing system, full-height full-width 8′ x 9′ sliding double-glazed panes.
Cost: about $54,000.
Consultants: Anthony Hunt & Partners, engineers.
Photography: Brecht-Einzig, Ltd.



Clean look of living-dining area, above, and bedroom, below, is achieved through lack of wall moulding, self-leveling polyurethane floor and suspended ceilings separated only by steel bents. Kitchen opens directly to dining area; rear façade, far left, has glass panels like the front.

Superpainting

At first glance another version of supergraphics, William Tapley's work in architectural space takes on a different aspect when he describes it as painting

It is natural to think of William Tapley's paintings as supergraphics, and in many respects they are. His giant, bold designs usually completely dominate the space they are in; they often "produce optical effects that destroy architectural planes, distort corners and explode rooms," as supergraphics was first defined almost five years ago (P/A, Nov. 1967). But even with this obvious interest in spatial experimentation, it is not his primary concern. Above all else, his main concern, he says, is to understand color.

Tapley's training has been exclusively in painting, first at l'Ecole des Beaux Arts in Paris, later at the Royal Academy in London. Early in his studies, though, he became disenchanted with the idea of painting on canvas, feeling it too closely associated with the idea of personal expression, which he wants to avoid. He prefers to associate himself with an earlier attitude toward painting that dates from the time when the artist was considered an artisan who, he says, "was trying to be objective and who was concerned with a genuine attempt to understand life." To grow in this understanding, Tapley believes the artist must primarily concern himself more with "what is wanted," than with "what I want." In this respect, his paintings usually express a programmatic content more related to his clients' or users' psychological needs and desires than to the function or use of architectural space, which is the main concern of supergraphics.

Lieb house

The Lieb house in Narbeth, Pa. met all its owners' requirements except that it was not completely to their taste, architecturally. They asked Robert Venturi, who had designed their beach house (P/A, Apr. 1970), what could be done, and his suggestion was to destroy the house, i.e., to destroy the values it represented—and he knew the person to do it. When Tapley went to see the house, he and the Liebs agreed that there was an important, crucial space to be destroyed: the main hallway, the spine of the house.

Because Mr. Lieb had an affection for birds, the three agreed that the hallway could be painted in the image of the inside of a bird's wing. Tapley then suggested using shades of russet which, it turned out, Mrs. Lieb disliked. Nevertheless, he made a sketch—knowing that people often say they dislike a color they actually might like—and Mrs. Lieb liked the russet when she saw the way it was to be used. In the finished hallway, the three tones of russet relate in intensity to the light intensities, which alternate in rhythms of clear, gray and black bulbs. Every other light, however, is silvered, which relates to the divisions between the wall colors.

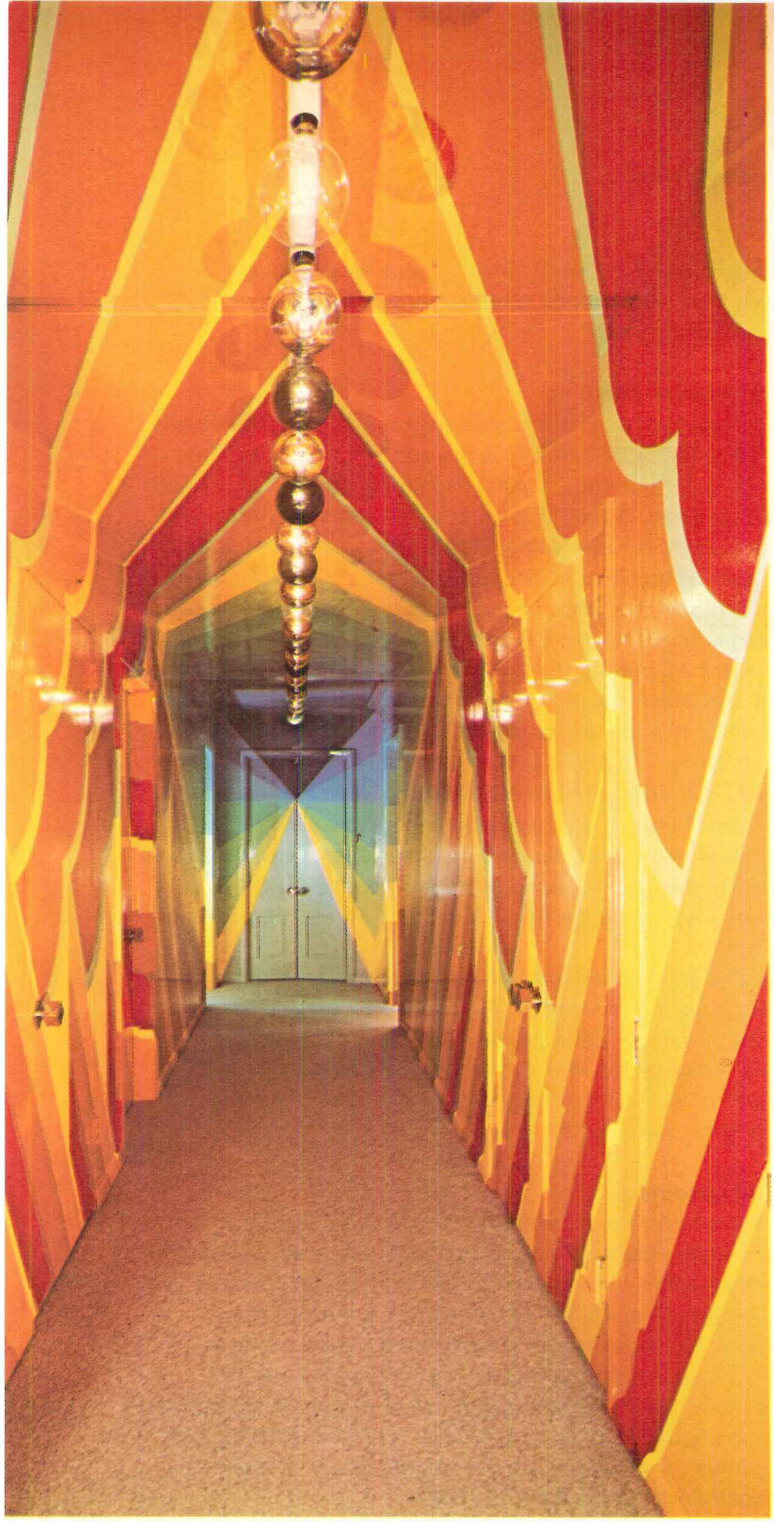
Open Community School

On the exterior of the Open Community School in Claverack, N.Y. the colors make up a painting Tapley calls "The House of the Rising Sun." The idea of a morning sunrise was appropriate here, he says; it makes the school more of a joyous place. There was a problem, though, because in this small, upstate town, it was felt that the neighbors would be offended by any exterior color other than white. Tapley toned down the colors with large amounts of gray, capitalizing on the situation by using dulled colors that actually enlivened the natural colors of the structure's bricks.

Perkel house

Two rooms were painted in the Perkel house in Midtown Manhattan: a playroom and a bedroom. In the playroom, Tapley tried not to think of colors and design, but thought instead of the two young children who would be using the room. He felt their room should be very light and airy, which suggested the use of pastel colors that led him to an image of a sunny beach where children might play after a rainstorm. On one side of the room, an idealized palm trunk establishes a first set of seven colors; these radiate throughout the room as fronds, each progressively toned lighter with turquoise until the last becomes almost totally turquoise, thus creating an overall impression of a recently washed sky seen through a palm tree. The kitchen, which partially extends into the playroom, was painted yellow to suggest a playbox on the beach. This opposition, he says, clarifies the space architecturally and allows people to "feel" the color in ways they are not usually conscious of.

In the Perkel bedroom, two main centers—a study and a bed—controlled design of the painting. To integrate the two, the client suggested painting a "highway" on the ceiling. So



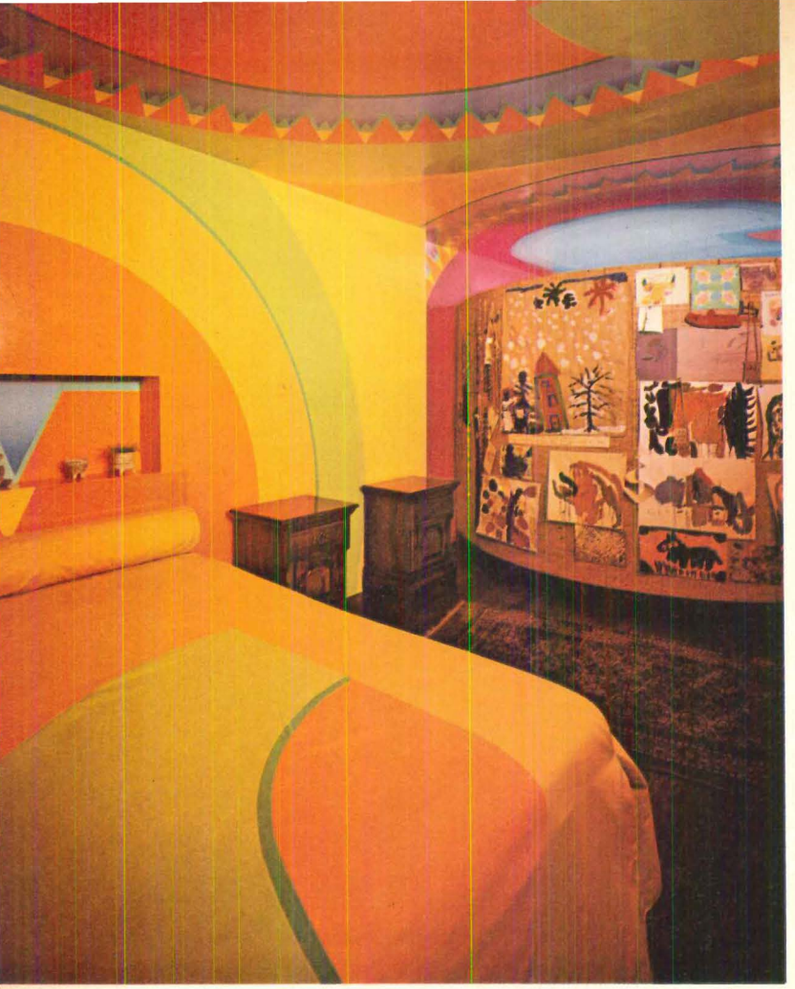
Lieb house.

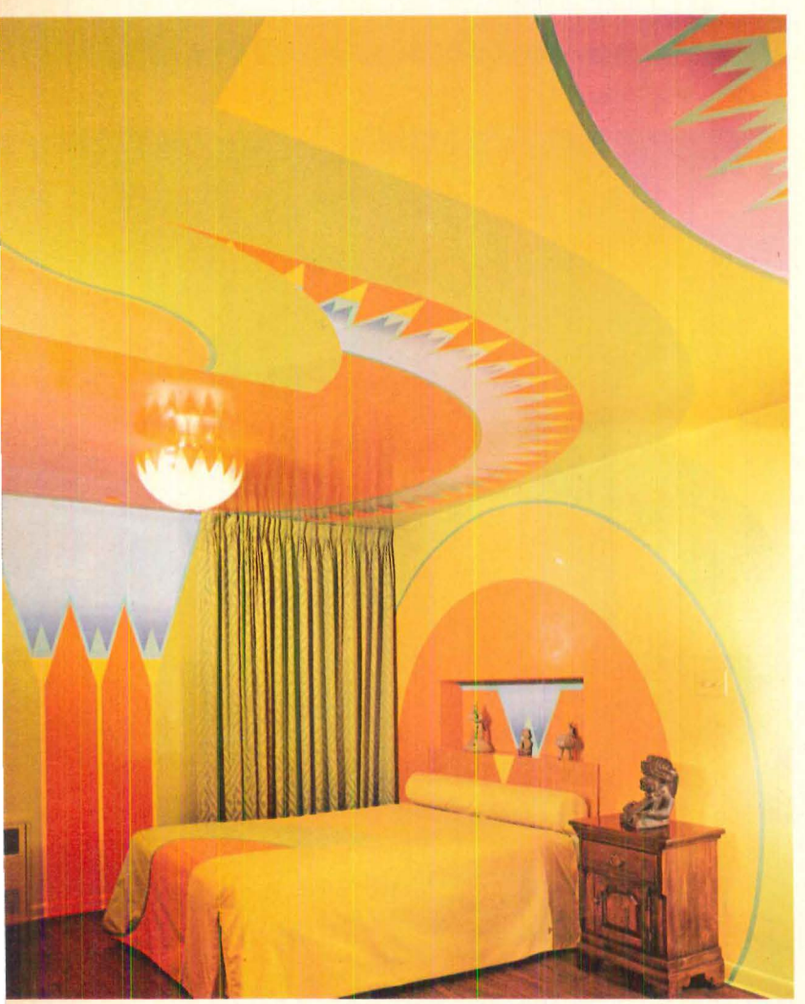




Open Community School.







Perkel bedroom, above, playroom, right.

Superpainting

Tapley painted, as part of the design, a stripe that enters the room, exits to the study, and then extends to the axis of the light over the bed.

A remodeled studio

The subtlest of all of Tapley's work is in a building designed in the 1930s by William Lescaze as a painter's studio. This building in Gladwyn, Pa. was recently purchased and remodeled for living. When Tapley first saw the space he was overwhelmed by its extraordinarily beautiful proportions; it was, he said, so numerically harmonious that it was very easy to work with. In this instance, the room itself became the major determinant of the design of the painting, while the colors were conditioned by the gray carpeting that had already been installed. Here, Tapley thought the only proper treatment would be to enhance, as delicately as possible, what was already there. The dominant architectural elements of the room are a 7-paned skylight over a 3-paned window where each end window pane is as wide as 2 skylight panes, and the middle window pane equals 3 skylight panes. Because of this direct mathematical relationship between the 2 + 3 + 2 (or 7) of the window and the 7 panes of the skylight, Tapley used 7 colors.

In the gray room there are four major colors, which suggest to him the four elements of earth, air, fire and water, echoed by three lighter colors. The entire composition, he feels, suggests the idea of positiveness in the major colors, negativeness in the lighter ones, and neutrality, or unity in the pale gray background.

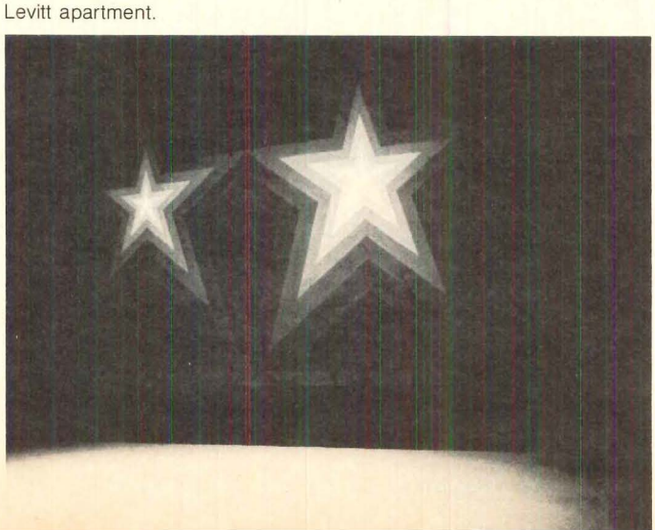
Levitt apartment

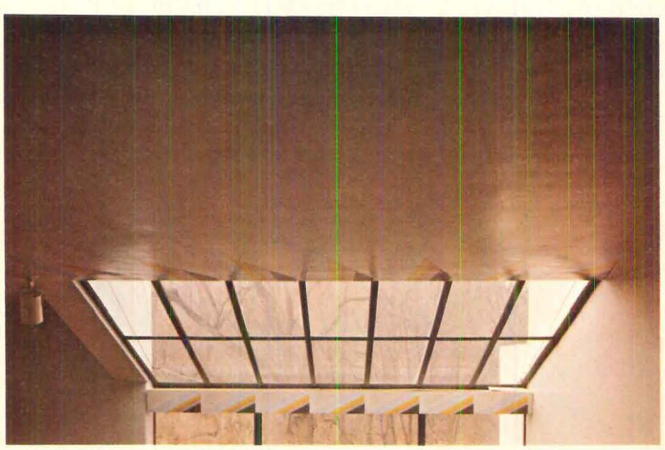
In the bedroom of an apartment of a Manhattan client who has a great interest in natural things, Tapley saw the east and west walls as a sunrise and sunset, one rising in gradations of cool colors, the other in warm colors. On the ceiling he painted two stars—recognizing that most stars are twins—whose illuminations radiate from ivory to cool blue-black. In this room, Tapley remarked that one does not necessarily see the colors on the ceilling but, rather, senses their presence. He wants people to feel color. And that, really, is what his concern for color is all about. [DM]



Remodeled studio, above and below.

Levitt apartment.

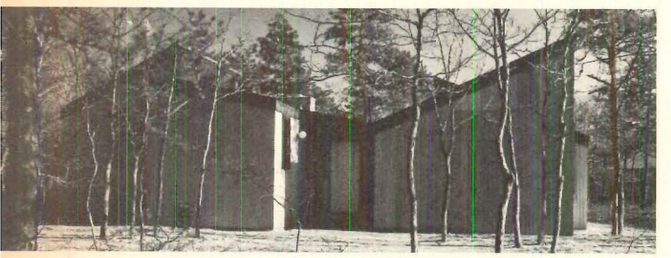


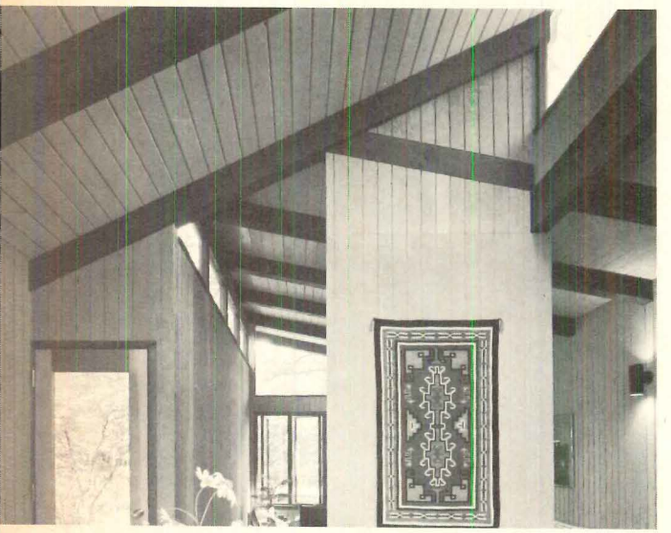


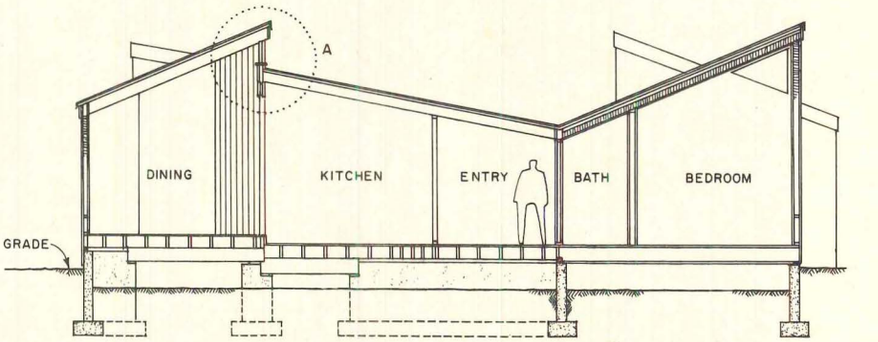
Photos: Robert Perron, except color, p. 123, Norman McGrath.

Selected details

Clerestory detail

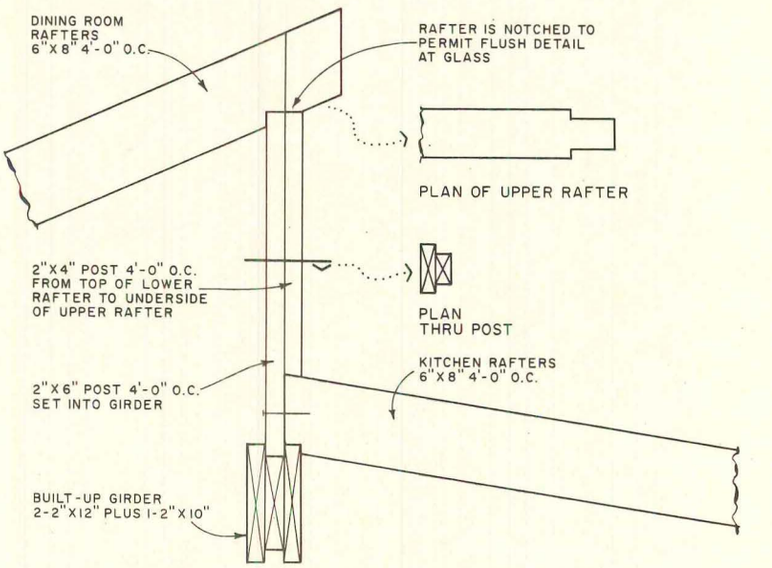




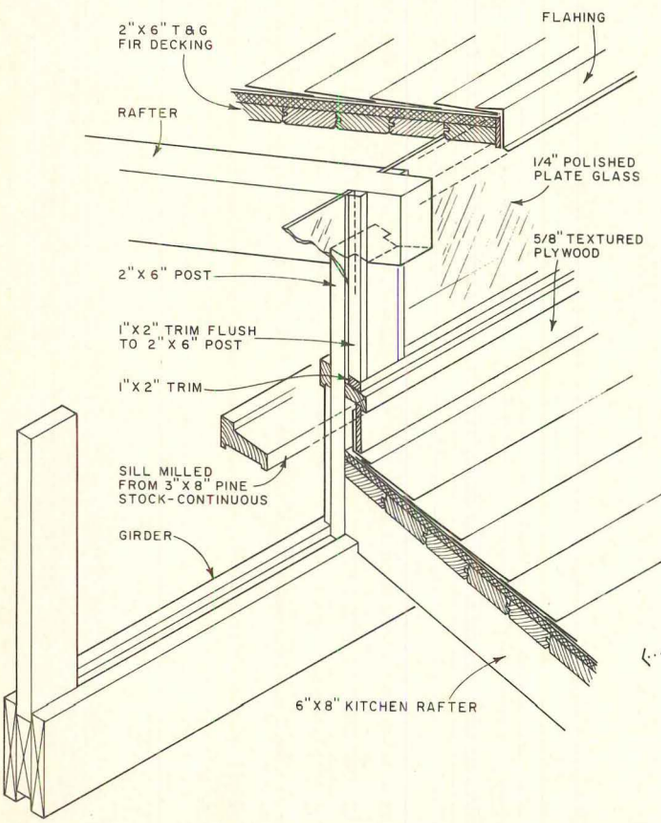


LONGITUDINAL SECTION

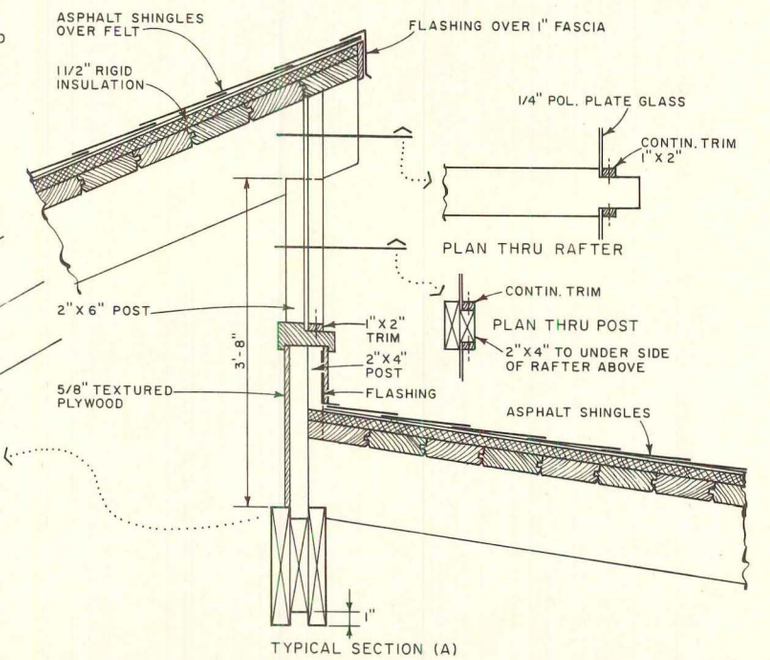
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ROUGH FRAMING (A)



ISOMETRIC VIEW OF "A"



TYPICAL SECTION (A)

Kelsh Residence, East Hampton, N.Y., David E. Guise, architect

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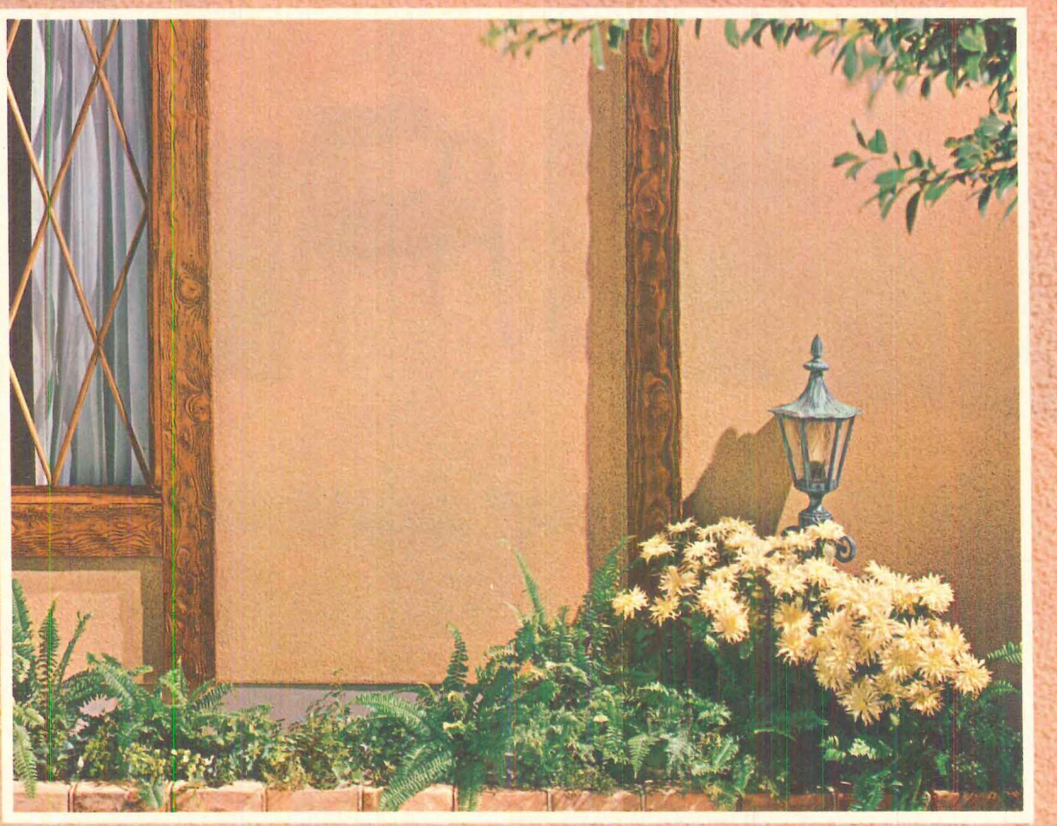
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Masonry does cost less.

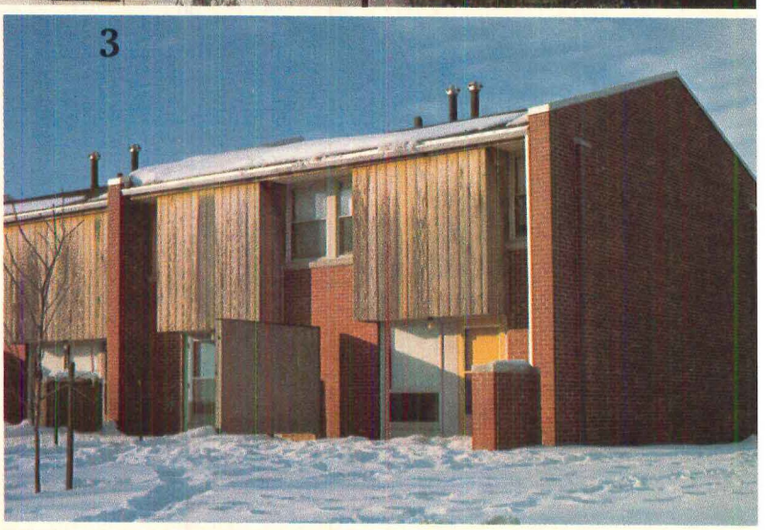
But that's only the second nicest thing about it.

The International Masonry Institute

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1


2


3


4

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If you're planning a public housing project, Andersen Windows are more practical on a total cost basis.

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Fuel costs are lower. Andersen Windows are made with a solid core of wood—one of nature's best insulators. Our weathertight construction and welded insulating glass (optional) complete the tight design against heat, cold, dust and drafts.

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2. Columbia Court Public Housing

Precast concrete "shadow panels" give this 90-unit complex in Muskegon Heights, Michigan its distinctive look.

The architects, Haughey, Black & Associates, designed special recesses into the panels where Perma-Shield Casement windows fit snugly.

The white vinyl sheathing on the outside blends well with the smooth-surfaced concrete. These windows can be opened straight out, allowing elderly residents to clean both surfaces from the inside—another cost-cutting benefit of Andersen Windows.

3. Family Housing Project

Hackner, Schroeder, Roslansky & Associates received an award from the Wisconsin Chapter of the A.I.A. for this series of townhouse groups in La Crosse, Wisconsin.

They were cited for the use of materials which added dignity and distinction to these low-cost dwellings. Among the materials used were Andersen Beauty-Line™ and Narroline™ Windows.

Beauty-Line windows combine a fixed upper sash with a ventilating, awning-style lower sash. They can be used singly or in groups, making them as versatile as they are attractive.

4. Award-winning Low-Rent Apartments

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The architects, R. F. Ackermann and Associates, carried the residential character of the neighborhood into these apartments with a warm and simple design.

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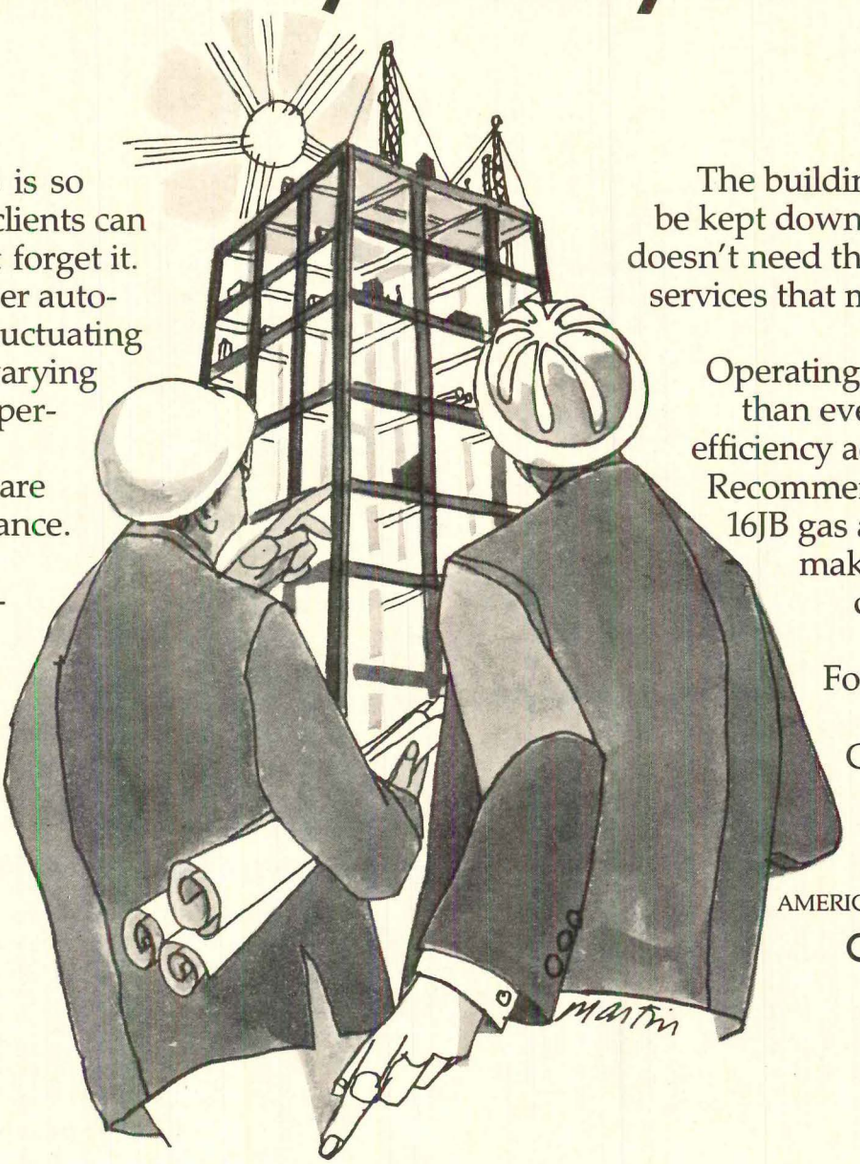
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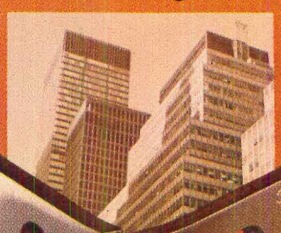
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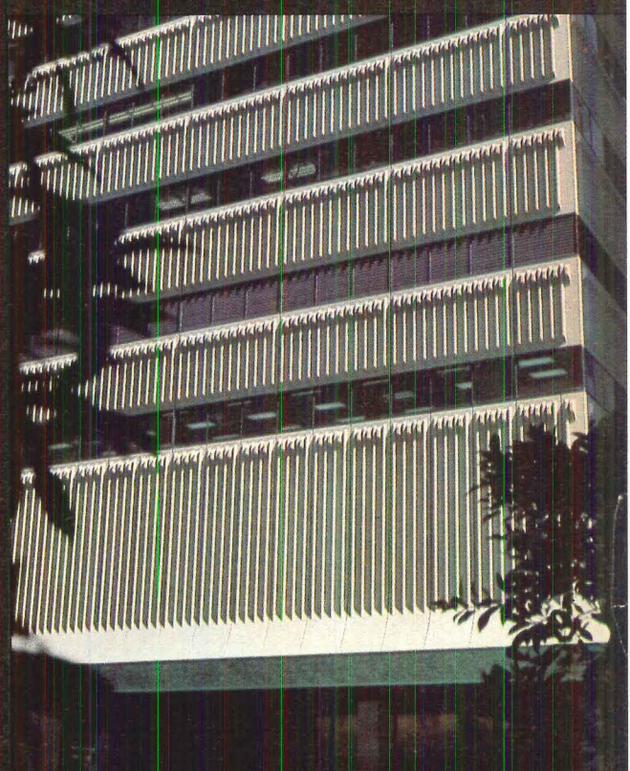
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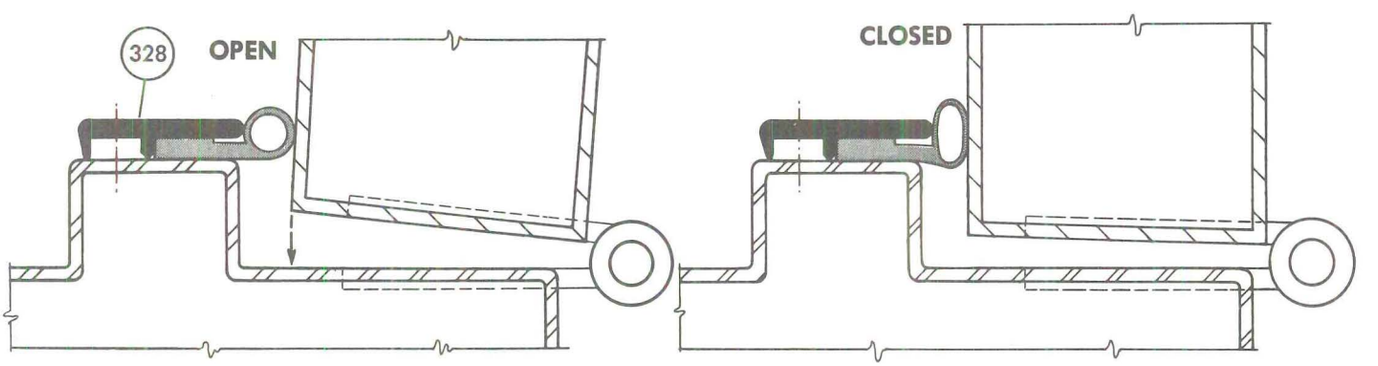
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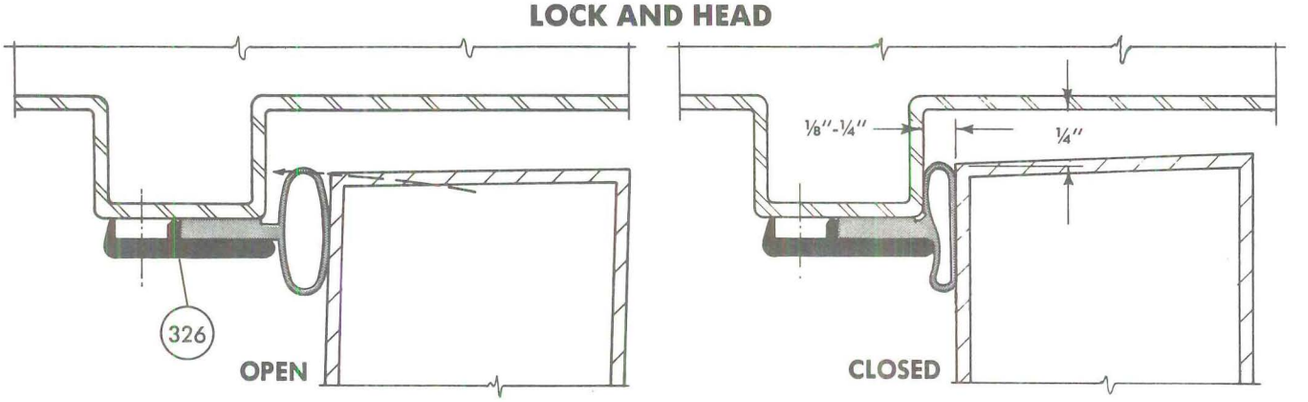
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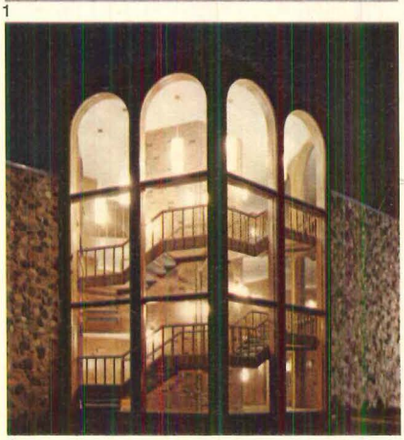
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4



5

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2. Imperial House Apartments, Kenosha, Wisconsin
Architect: Sheldon Segel, A.I.A., Milwaukee, Wisconsin
3. Delta Airlines Waiting Rooms, Standiford Field, Louisville, Kentucky
Architect: Pierce, Wolf, Yee & Assoc.
4. Ashland Ski Bowl, Ashland, Oregon
Designer: Robert L. Bosworth, Medford, Oregon
5. Bismarck Municipal Airport Terminal, Bismarck, North Dakota
Architects: Ritterbush Brothers, Bismarck, North Dakota

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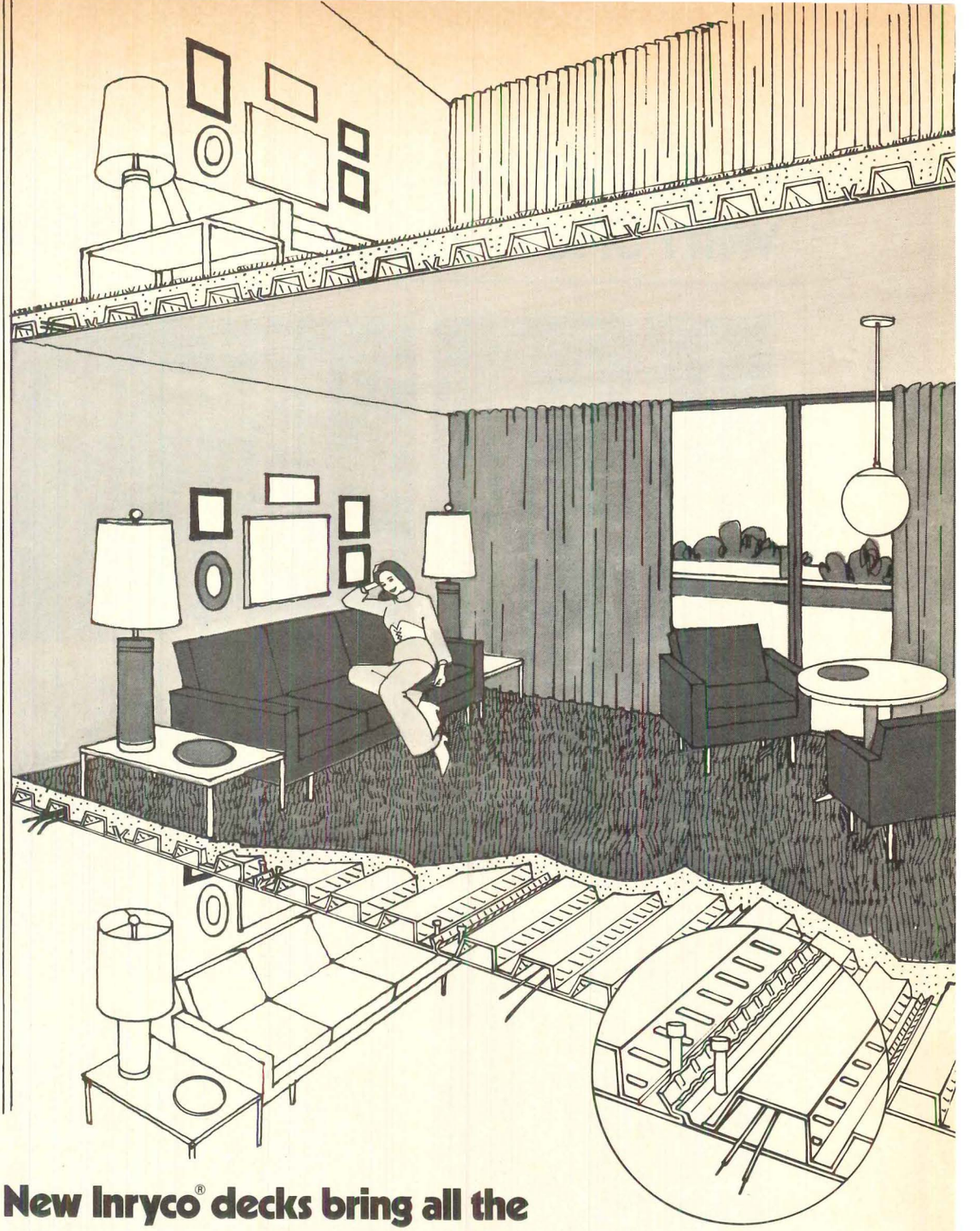
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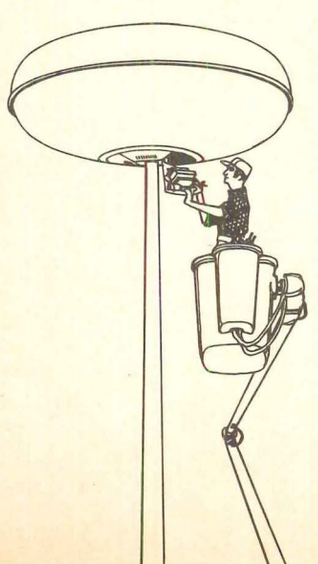
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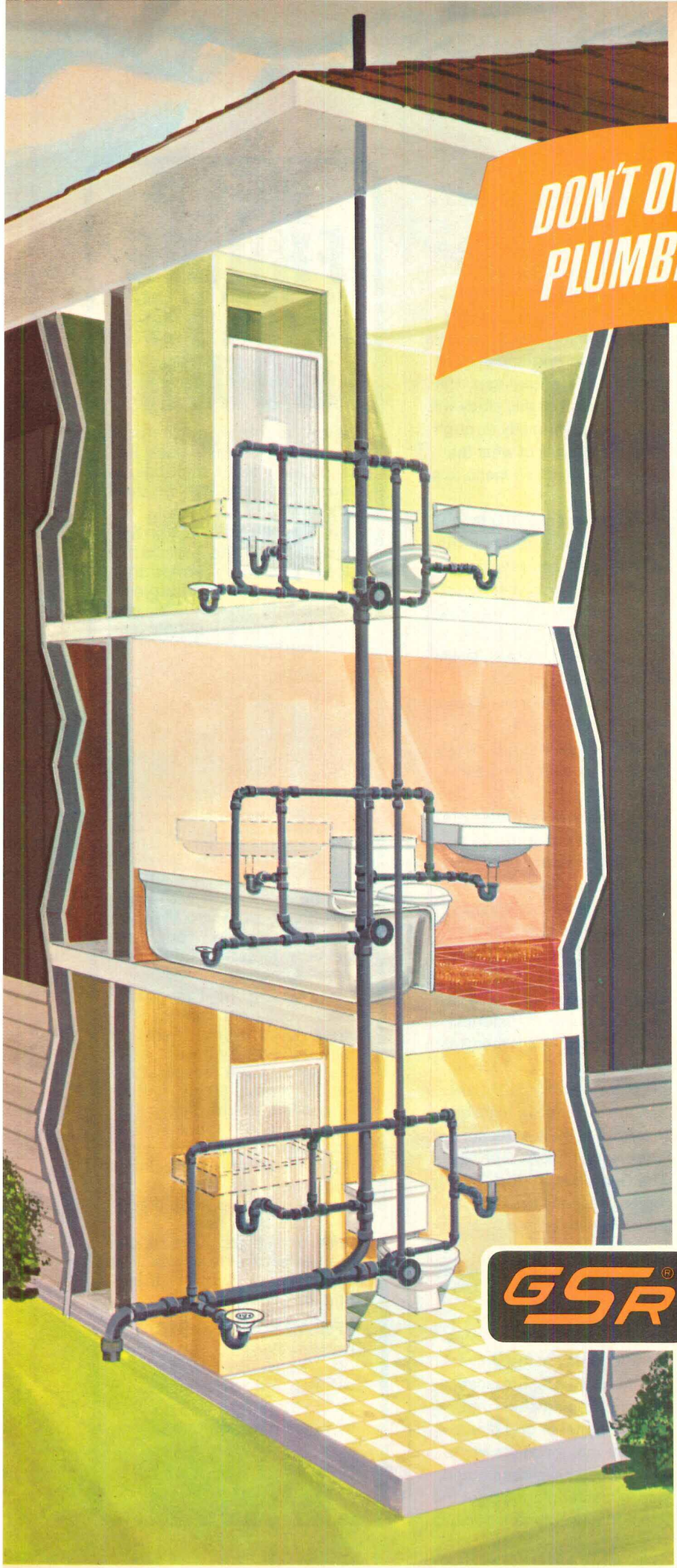
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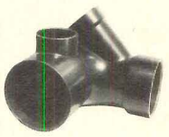
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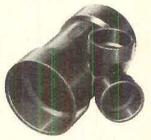
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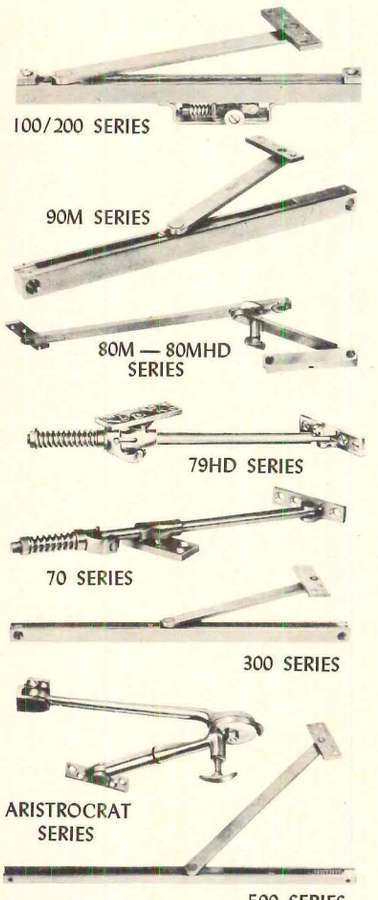
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Books continued from page 146

The architectural glories of Portland are revealed in this wonderful little book, which has been around for a few years, but which, once discovered, as we did belatedly, is to be enjoyed forever.

The product of "many years' research and much reflection on the part of persons and groups interested in Portland and its everchanging architectural heritage," the authors state their hope that this study will provide a "sense of the living city through several decades and images of what the city is and was—and what it can mean to a new age."

And meaning it has, considering that one of its authors, George McMath, is the grandson of A.E. Doyle, one of Portland's more famous architects; a number of his projects done in the early 1900s are shown in the book. Pietro Belluschi, 1972 AIA Gold Medal winner, worked for A.E. Doyle and carried on his practice after his death. Some of his early works are shown; for example, The Portland Art Museum, which was executed under the A.E. Doyle & Associates masthead, with Pietro Belluschi the credited designer.

George McMath became very interested in the older buildings of Portland—he is also chairman of the Portland Historical Landmarks Commission—no doubt because the better ones were designed by his grandfather; his firm is now restoring and remodeling the Pioneer Post Office into a Federal Court Building.

Thomas Vaughan, the co-author, is executive director of the Oregon Historical Museum, which is housed in another Belluschi-designed building.

The photographs of each building are sharp and clear, the descriptive texts brief and factual; in all, the book is a treasure of traditional architectural history. One word of warning—The Oregon Historical Society has only 30 copies presently available; however they are working on reprints.

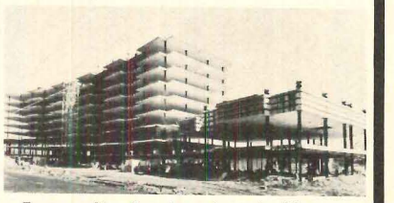
Orthogonal Town Planning in Antiquity *by Ferdinando Castagnoli. Cambridge: MIT Press, 1971. 138 pp. $12.50.*

This scholarly book written by a professor of ancient archaeology at the University of Rome examines Greek, Etruscan, Italic, Hellenistic and Roman cities that were based on orthogonal or grid plans. The author suggests that the implementations of these plans may have constituted the first exercise in master planning for the future extension and development of cities.

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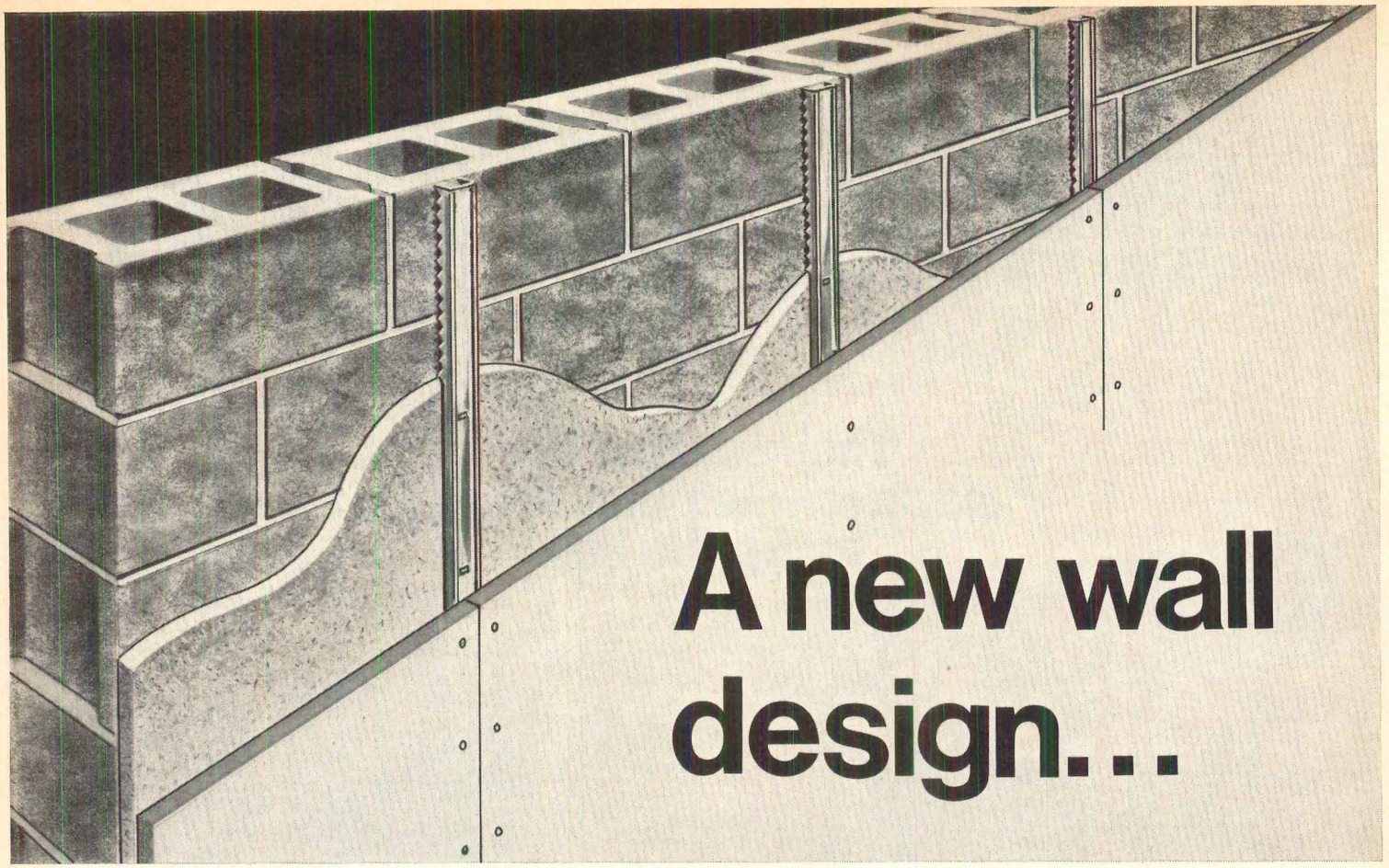
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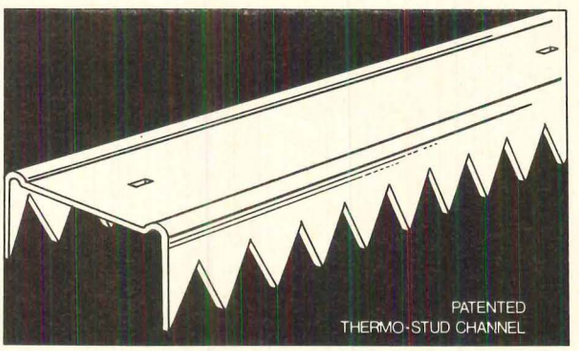
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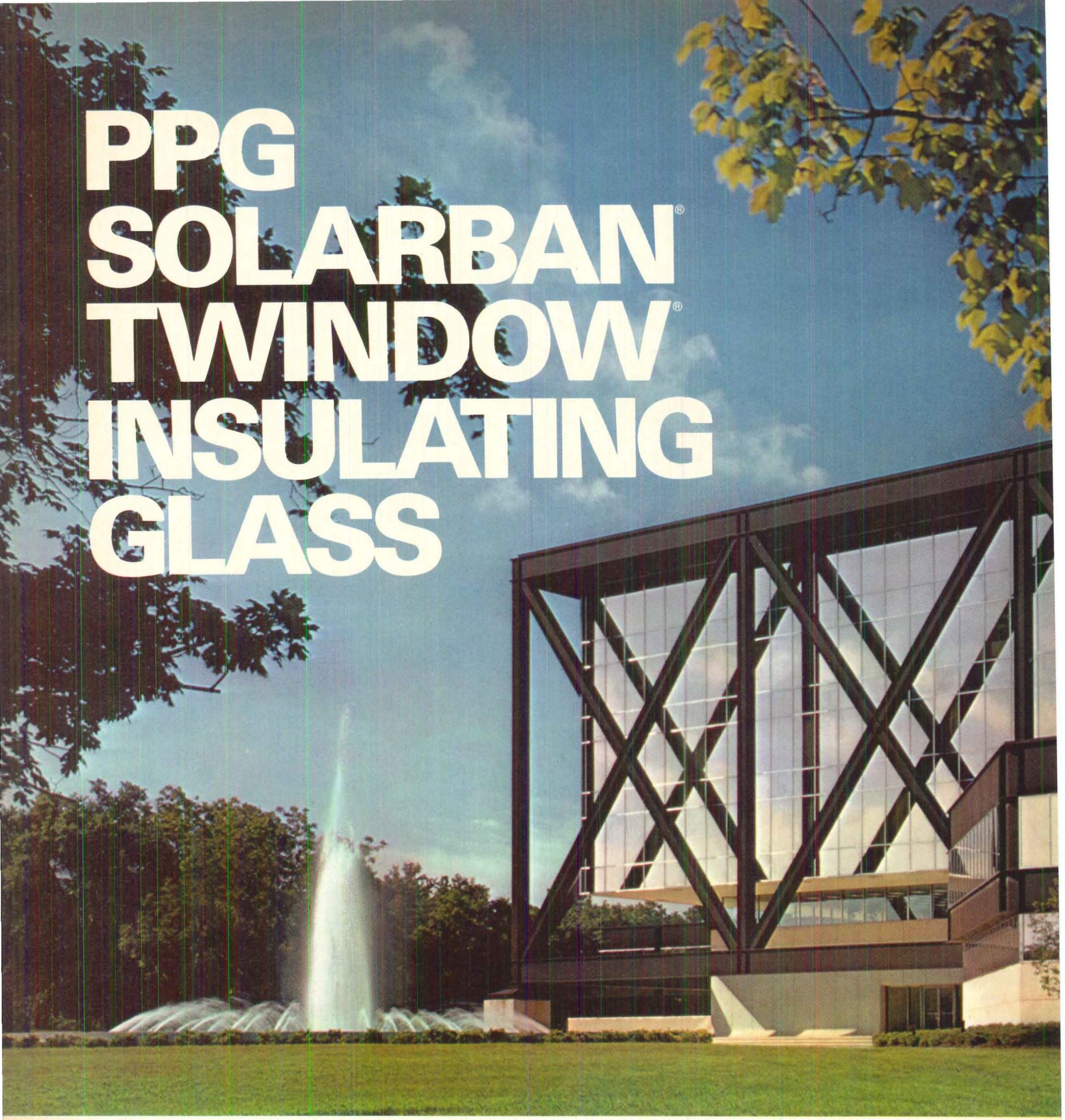
Bally Walk-In Coolers and Freezers belong everywhere mass feeding takes place. They can be assembled in any size for indoor or outdoor use from standard panels insulated with four inches of foamed-in-place urethane, UL 25 low flame spread rated. Choice of stainless steel, aluminum or galvanized. Easy to enlarge . . . easy to relocate. Refrigeration systems from 35°F. cooling to minus 40°F. freezing. Subject to fast depreciation and investment tax credit. (Ask your accountant.) Write for 28-page book and urethane sample. **Bally Case and Cooler, Inc., Bally, Pennsylvania 19503.**

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Rex Goode Organization for Design
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Pacific Design Center

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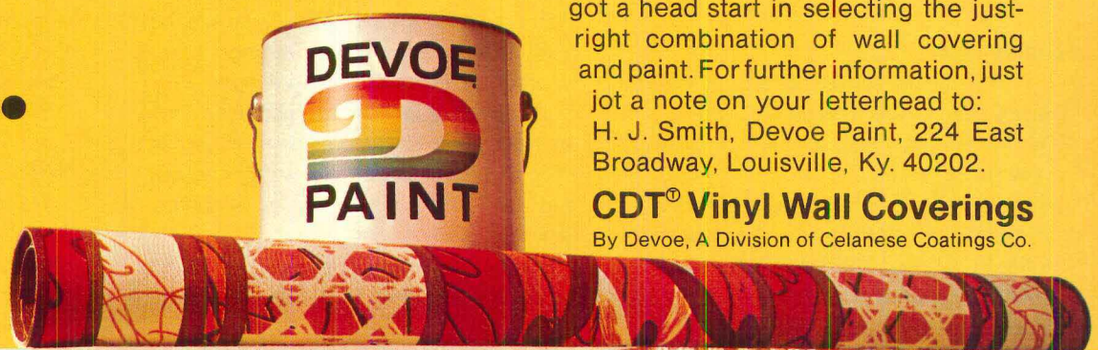
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Vinyl wall covering is new *Raja-Sari* with Devoe *Burnt Orange* and *Pink Feather* paint colors.

Notices

Appointments

Kaeser & McLeod—Architects & Engineers of Madison, Wis. is now Kaeser, McLeod & Weston following the appointment of **Marcus E. Weston** as partner.

Francis J. Connell has been appointed interim head of the Garden City, N.Y. office of McFarland-Johnson-Gibbons Engineers, Inc.

Ross W. Pursifull, AIA, has been named a vice president of Property Development Group, Inc., Ann Arbor, Mich.

Thomas VanHousen has joined Ellerbe, architectural-engineering-planning firm of St. Paul, Minn., as director of special projects.

Vincent G. Kling & Partners, Philadelphia, has appointed the following to the position of staff architect: **John B. Di Ilio, Clifford J. Marchion, Ann Sinclair Morris, Mark Spitzer, Bernard J. Cywinski, Andre C. Schoerke, Kimti Sharma** (staff planner), **Arthur P. Foster, Jr., Edgar G. Cross, II, James Winer, Glenn Kahley, George Danhart** and **Daniel Briggs.**

Gerrit Zwart has been made an associate of Shepley Bulfinch Richardson and Abbott, Boston.

Thomas Hanawalt, E. David Reitzel and **Robert Stevens** were elected associates of Eberle M. Smith Associates, Inc., Detroit.

Bruce G. Sloan and **Allen Cristofani** have become associates in Karl Treffinger and Associates, Architects, San Francisco.

Joseph D. Joachim, PE, has been named an associate and vice president of programming and development of Swanson Associates, Inc., Architects, Engineers, Planners, of Bloomfield Hills, Mich.

Fred H. Markus has been named the first group vice president for the Paris region of A. Epstein and Sons, Inc.

George Haecker has joined Bahr Hanna Vermeer Architects of Lincoln and Omaha, Neb. The firm will now be known as Bahr Hanna Vermeer & Haecker.

Richard Paul Suma has joined Environmental Research & Development Inc., New York City, as executive director of design.

Robert Welty Braunschweiger has joined Albert C. Martin and Associates, Los Angeles, as project director.

Ronald Isao Sakahara has been appointed chief designer for Swank-Gesler Partners, AIA, Orange, Calif. **Maurice Johns** was named director of production.

Grillias-Savage-Alves, Santa Ana, Calif., has changed its name to Grillias-Pirc-Rosier-Alves; **A. Eugene Pirc, EE-ME** and **A. John Rosier, CE-SE,** are directors.

Candace Kling and **Pamela S. Hull** are now associates of Jules G. Horton Lighting Design, Inc. of New York and Dallas. **Henry Hahn, PE,** has joined the firm.

Robert E. Girts and **James D. Kling** have been named associates of Deeter Ritchey Sippel Associates, Pittsburgh.

Ralph Jones, AIA, has joined A. Epstein & Sons, engineers and architects, as chief architect in the New York office.

Myles Weintraub has been appointed an associate and director of the new division of housing at Kahn & Jacobs, Architects of New York City.

Morton S. Stone has been appointed director of communication, Ewing Cole Erdman & Eubank, Philadelphia.

Morris Bolter has been made a partner in Widom/Wein & Associates, Los Angeles.

Saverino M. Napolitano has been appointed vice president in charge of production for Brodsky, Hopf & Adler, PC, New York City.

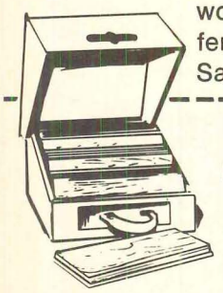
Colonel William H. Lillie, Jr., USAF-Ret.,

[continued on page 170]

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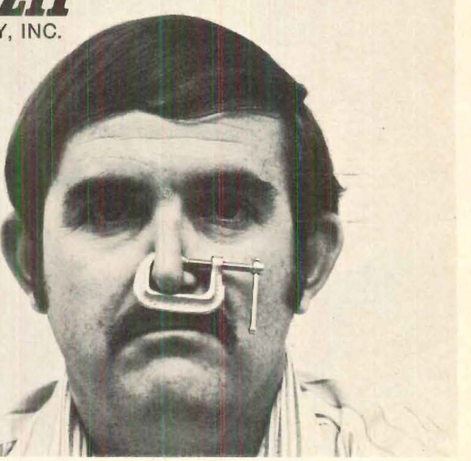
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The Invisible City

The resources of a city are its people, places and processes. It is our collective attitude toward these resources that either encourage the destruction of the city through apathy and abandonment or reaffirm the necessity of the city to civilized life by participation and use. Use as the place for learning; participation as the involvement of everybody as a teacher.

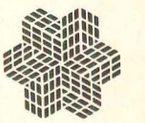
We live in the invisible city. A place where public information is not public; a place that is not maintained because it is not creatively used. The most extensive facility imaginable for learning is our urban environment and the people in it. If we can make our urban environment observable and understandable we will have created classrooms with endless windows on the world.

We'd like you to join us for the 22nd annual International Design Conference in Aspen, Saturday through Thursday, 17-22 June 1972. There we will all be teachers and we will all be students. Talking together, we will explore ways of making the many resources for learning in our cities visible, accessible, and comprehensible to all. We will have conversations with people who are now doing exactly that. Among them:

Warren Bennis, William Birenbaum, John Bremer, John Bunting, David Clarke, Richardson Dilworth, John Dollard, Nancy Donovan, Charles Eames, Leonard Finkelstein, Marcus Foster, Farnum Gray, Alan Green, John Holt, Ivan Illich, Nicholas Johnson, Louis I. Kahn, Bernard Kohn, Ruth Kohn, Bill Lacy, Alan Levy, Simon Nicholson, Harry Parnass, Albert Eide Parr, Lisa Licitra Ponti, Jaquelin Taylor Robertson, Michael Southworth, Larry Wells, and Troy West.

And, as the following calendar makes clear, we expect to have a good time.

Richard Saul Wurman
program chairman



Saturday 17 June

10 am-3 pm, registration (there will be a special rate on the Highlands ski lift).
3-6 pm, opening night party, which we hope will take place on a closed-off street with the town invited.
8:30-10:45 pm, opening.
Welcoming words from Jack Roberts, president of IDCA.
A description of the week's activities and goals by the program chairman, Richard Saul Wurman.
Wiseman's film *The High School.*

Every morning

8:30-9:30 am, 5¢ coffee and coffee cake. Talk, listen, watch names become people.
9:30 am-noon, the Aspen music tent will be the scene of a TV-talk-show format interview session. Each day three of our resource people will be individually interviewed.

Midday

Buy 1/6 of a lunch for $1.25 and turn five strangers into friends. We won't sell you a whole lunch, but enough bread, or meat and cheese, or fruit, or drinks, for six people and it will be up to you to find five others who want some of what you have and who have some of what you want. While you eat together you may find that your ideas make good sandwiches, too. The resource people will have the napkins and forks, so you'll be sure to meet them.
On Tuesday, between 2 and 6 pm, our annual fish-fry at the ghost town of Ashcroft, with fresh-caught brook trout sauteed for you next to a white water stream.

Every afternoon (except Tuesday)

2-5 pm, explore the options.
All our resource people will be available and there will be demonstration School Without Walls meetings with local resource people. Everyone can participate, including children. You might meet a chef, a local planning official, or an artist/craftsman; take a tour of Aspen's architecture; or learn to identify local varieties of mushrooms and the wildflowers of the area.
The "Exhibit of Exhibits" will include "Making the City Observable" and exhibits from New York, Hartford, Philadelphia, Chicago, Montreal, and Lowell; a series of drawings by Lou Kahn about the use of the street; and anything pertinent *you* might like to include concerned with using the urban environment for learning.
You may browse in a special bookshop run by Sam Yanes, editor of *Big Rock Candy Mountain.*
Or take map drawing with Troy West, who will roll paper down an Aspen Street. You and other members of the community will participate in designing a meaningful map.

Evenings

8-10 pm.
Sunday, an evening with Ivan Illich.
Monday, Louis Kahn.
Tuesday, Charles Eames.
Wednesday, yet to be confirmed.

The Late Show

10 pm-midnight.
Monday and Wednesday, films.
Tuesday and Thursday, ice skating at Brown's Palace.

Free and useful conference literature

Aspen Visible, a guidebook to Aspen with maps and information.
A *Yellow Pages of Learning Resources,* definitions of over 100 generic people, places and processes.
A set of posters by 11 designers graphically illustrating many of the *Yellow Pages* items.
A chart book with magazine and newspaper articles dealing with the theme of the conference.
A booklet of the week's events and information about the resource persons.
A special issue of *Design Quarterly* devoted to conference proceedings to be published in the fall and distributed free to all conferees.

The International Design Conference in Aspen 1972

Registration fee, $100.
Companion, $50.
Student (proof required), $35.
Fees include access to all conference programs and literature.
Make your check payable to IDCA and send it to: IDCA, Box 664, Aspen, Colorado 81611 U.S.A.
Your check will be your receipt.
Registrations will not be accepted after 2 June or after cutoff number has been reached, whichever comes first.

Please reserve _____ places for *The Invisible City,* IDCA 1972

Name _____

Address _____

City State Zip _____

Occupation _____

My check for _____ is enclosed.



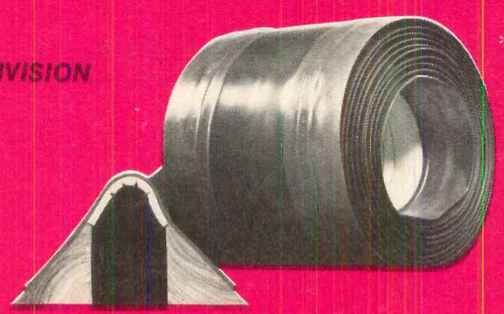
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Mating habits of the all-aluminum column cover.

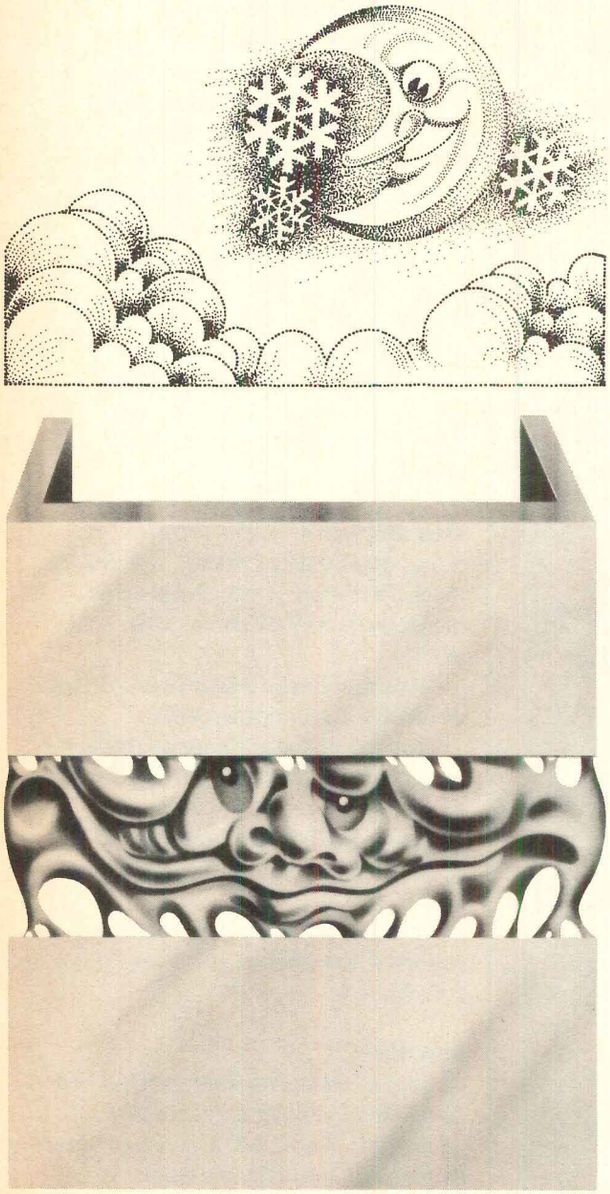


By itself an aluminum column cover is a thing of joy and beauty forever. The trouble starts when you try to make a waterproof joint between a pair of them.

Let's say the job calls for a ⅜″ joint between 12-foot panels. The panels are set in place at 8:30 a.m. The temperature is 50°F when the sealant is applied. (Above, left).

But now the temperature starts to rise. By 4:00 p.m. it's 85°. And those dark-colored, dull-finished, insulated panels are up to 175°. The joint has compressed to ¼″. This is normal building movement. But look what's happened to the sealant. (Above, center).

Heat speeded the cure. And by 4:00 p.m. the sealant has cured to a firm bead ¼″ wide.



Now the temperature drops. By 9:00 p.m. it is 20°; the joint opens up to $\frac{7}{16}$". And while the job called for a ⅜" cured bead that could move 25% either way, it actually winds up with a ¼" cured bead that must elongate more than 50% to $\frac{7}{16}$". It probably won't stick it out. (Above, right).

Here's how you can avoid this problem.

Design the joints at least ½" wide. This way, you will wind up with a ⅜" cured bead that has to move just 25% of its cured width.

If it is aesthetically feasible, use 6-foot instead of 12-foot panels. You'll cut panel expansion in half and stay well within the sealant's movement capability.

Better still, you might talk to us while you are still in the design stage. We're Tremco. And we cope with aluminum column cover sealant problems every day of the year. We also have some 15 basic sealant formulations to work with — including such familiar names as MONO (our job-proven acrylic terpolymer), DYmeric (our Tremco-developed polymer), and Lasto-Meric (our polysulfide).

With all this going for you, you can stop worrying about the mating habits of the all-aluminum column cover. Because Tremco will come up with a sealant system that will stick with you for years on end. The Tremco Manufacturing Company, Cleveland, Ohio 44104, or Toronto 17, Ontario.

TREMCO
The water stoppers

Notices continued from page 164

has been named Washington, D.C. representative for Neuhaus & Taylor.

Alan Eliot Goldberg has been appointed senior associate in the architectural department of Eliot Noyes & Associates, New Canaan, Conn.

Donald W. Lehman has joined Pearce & Pearce, Inc., St. Louis, as project manager.

Robert Bryan has been appointed vice president for design by David Jay Flood & Associates, Incorporated, Los Angeles.

Lawrence L. Davis has joined Raymond Loewy/William Snaith, Inc., of New York City and London, England, as vice president in charge of operations.

Albert A. Mathews has been elected to the board of directors of CRS Design Associates, Inc., Houston, Tex.

Joseph H. Mindrum, PE, has been appointed to the staff of Bakke & Kopp, Inc., Minneapolis, Minn.

Billy D. Wunsch, Ronald J. Labinski and **Aubrey R. Davis** have been appointed trustees and vice presidents in the firm of Kivett & Myers, Kansas City, Mo.

Dorothy M.N. McClellan, EIT, has been named project engineer in the land development division of Hilborn, Werner, Carter & Associates, Inc., Clearwater, Fla.



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Expansions

Tariq M. Shamma Associates, Inc., Anaheim, Calif., has formed TMS International, a division concerned with overseas operations.

Bissell/August Associates, Newport Beach, Calif., has formed Interior Space Design, a division headed by Glynn Brown.

Name changes

Loren Mastin AIA Architect, 103 Amherst S.E., Albuquerque, N.M. 87106.

Ogden Development Corporation, 9200 Sunset Boulevard, Los Angeles, Calif. 90069.

JFN Associates, Incorporated has opened offices at 38 Wigmore St., London West 1, England, headed by Francis Duffy, and at 31 Rue de la Vallee, Brussels, Belgium, headed by Vladimir Vojvodic.

Decker, Kolb & Stansfield AIA Architects, Seattle Wash., is now **Kolb & Stansfield, AIA Architects.**

Charles A. Maguire & Associates, Inc., Providence, R.I. is now **CE Maguire, Inc.**

Eckbo, Dean, Austin & Williams, Loring Park Office Building, 430 Oak Grove, San Francisco.

New addresses

Santa Clara Valley Chapter, AIA, Marina Playa Office Park, 1333 Lawrence Expressway, Suite 219, Santa Clara, Calif. 95051.

Chaix & Johnson Associates, 7060 Hollywood Blvd., Los Angeles 90028.

Vosbeck Vosbeck Kendrick Redinger has opened a new office at 815 South Jefferson St., Roanoke, Va. 24016.

P. Joseph Lehman Consulting Engineers, 1005 Penn St., Hollidaysburg, Pa. 16648.

Carl Walker & Associates, Inc., has opened a new office at 707 Davis Rd., Suite 200, Elgin, Ill.

New firms

Charles L. McMurray Architect, 830 Providence Road, Charlotte, N.C. 28207.

Harvey B. Gantt, AIA, and Jeffrey A. Huberman, AIA, have formed **Gantt/Huberman Associates, Architects and Planners,** 212 South Tryon St., Suite 717 Johnston Building, Charlotte, N.C. 28202.

Jack Dollard, Architect, 15 Lewis St., Hartford, Conn.

Peter J.M. Trozze, AIA, 22 Smith Rd., Binghamton, N.Y. 13905.

Stanley Pomeranz and Robert Hogrefe have formed **Intradesign Group Inc.,** 170 Fifth Ave., New York City 10010.

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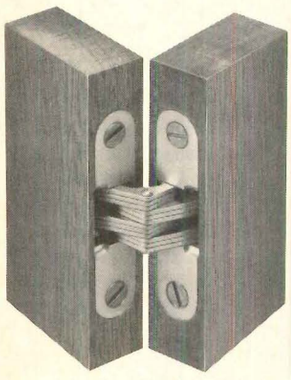
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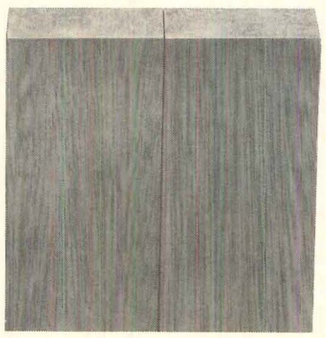
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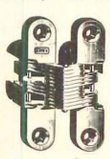


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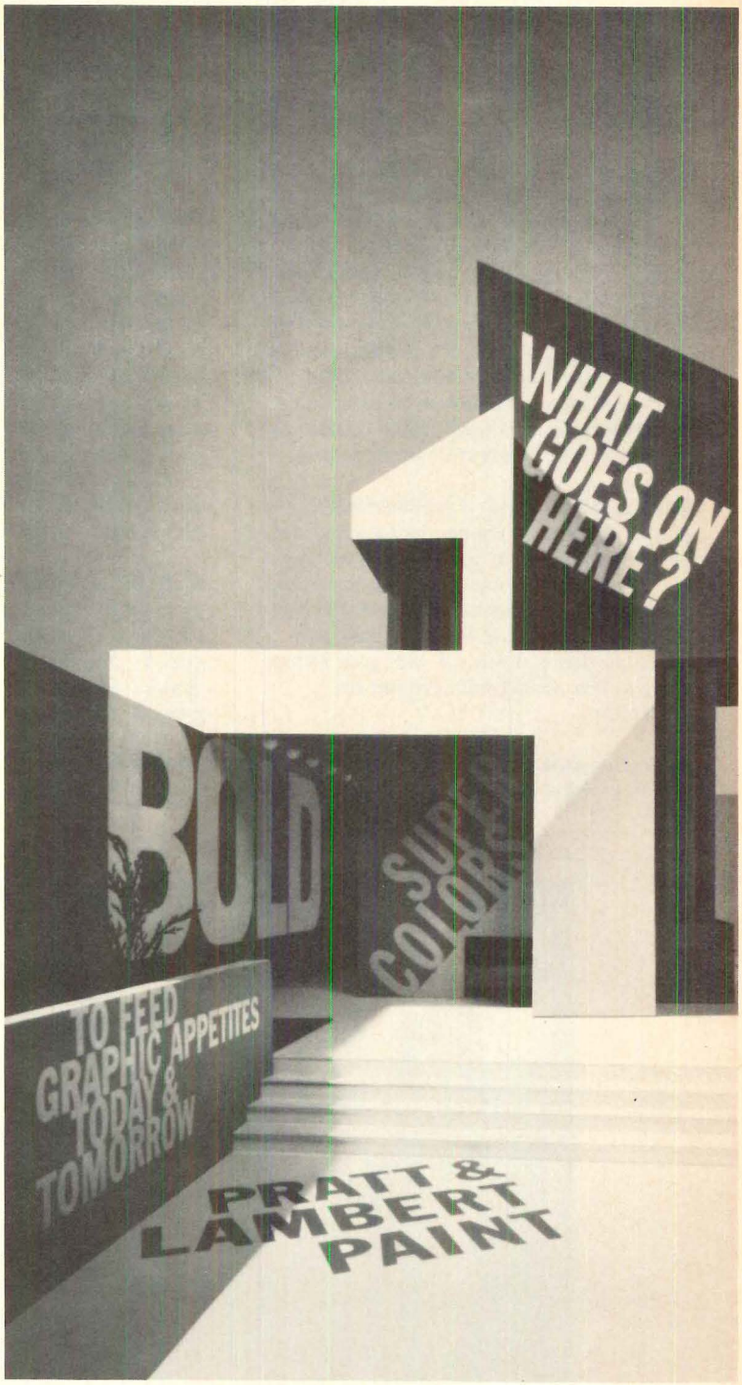
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Job mart

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Architect: An established Architectural-Engineering firm seeks a young, degreed architect with strong interest in specification writing. Must have thorough knowledge of materials and methods. Experience in C.S.I. methods and computerized specifications desirable. Submit confidential resume with your salary history to Box #1361-360, *Progressive Architecture*.

Architect or experienced draftsman: Small office in growing recreational and resort community in beautiful rural valley. 1½ hours from large city. Diversified practice. Associateship possible. Send resume to P.O. Box 186, Ojai, California, 93023.

Architects: Excellent positions in design and working drawings in 170 man A & E office in out-state Michigan. Broad range of project types. Daverman Associates, 200 Monroe, N.W., Grand Rapids, Michigan 49502. An equal opportunity employer.

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Architect/planner: Design experience in planned residential developments. Four or five years of recent "on the board" experience in projects of 30-800 acres scope. Good drawing and graphic ability necessary. License not required. Absolutely unique and pleasant working conditions on estate in San Francisco Bay Area. Office has work of national scope with projects in 12 states. Excellent growth and advancement potential. Send resume to Charles W. Delk & Associates, Inc., 2300 Danville Boulevard, Walnut Creek, California 94595, Attention Mr. Loving.

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Senior architectural draftsmen: Large established architectural office in northeast Florida needs senior draftsmen and job captains with at least five years experience in preparing working drawings for multi-storey commercial, institutional and residential buildings. Send resume to Box #1361-363, *Progressive Architecture*.

Situations wanted

Architect: A.I.A., NCARB Certificate, N.Y. registration, East Coast backbround with diversified experience in planning, design, and production. Seeking responsible position with progressive architectural firm. Recent experience in Midwest. Desire position with partnership potential. Resume upon request. Reply to Box #1361-364, *Progressive Architecture*.

Architect: A.I.A., NCARB. Degrees: sociology and architecture. Desires to relocate to New York or Conn. 37, married. 11 years experience in all phases of architecture; last 5½ years with urban renewal agency: planning, administration and development. Seeking responsible, challenging position best utilizing abilities. Reply to Box #1361-365, *Progressive Architecture*.

Architect: A.I.A., NCARB registration, Fulbright scholar '55-'56. Desires relocate family to Arizona, South Texas or similar area. Experience; project Architect with major U.S. firm, corporate architect with national developer, with national franchise chain, presently engaged in small private practice. Seeks situation leading to participation, will invest. Reply to Box #1361-366, *Progressive Architecture*.

[continued on page 176]

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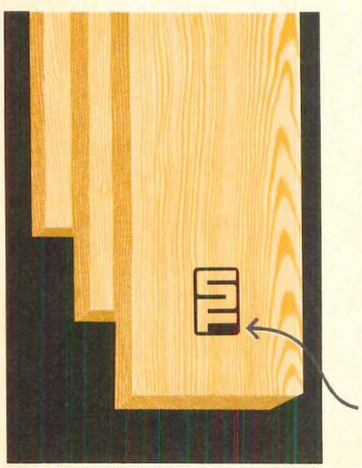


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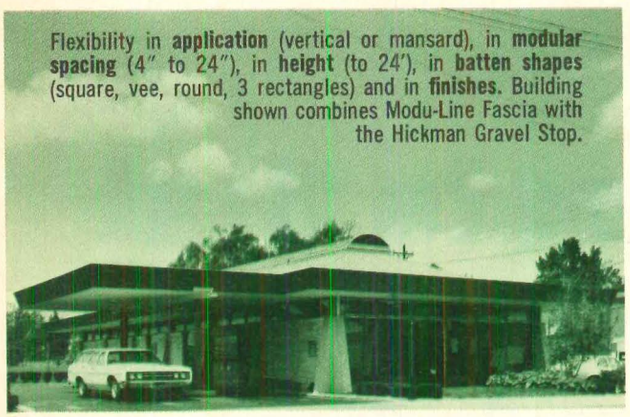
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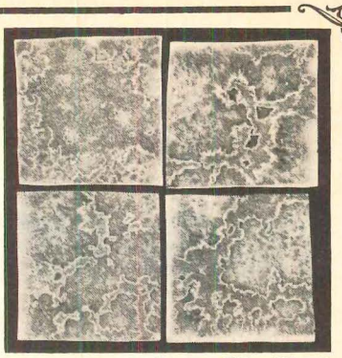
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Job mart continued from page 172

Architect: California registration, A.I.A. Age 38. Sixteen years experience. Exceptional record of achievement in planning and design of major, high quality projects. I am seeking discussions with principals of a progressive architectural firm, leading to the position of partner or associate in charge of design activities. Accustomed to taking the initiative and assuming maximum responsibility in managing and directing group effort. Experienced in effective promotional and design presentations to top echelon executives of national firms. Excellent personal design commendations. Extensive background in prestige, high rise office buildings. Commercial, educational, industrial, residential, and recreational experience. Travel acceptable. Reply to Box #1361-367, *Progressive Architecture.*

Architect: Eager Australian. Age 29, married, seeks position with progressive firm engaged on high rise commercial projects, or, R & D on polyester/A.B.S. based industralized systems. 5 years post graduate experience. Competent draftsman. Available for interview anywhere in U.S. West Coast or New York area preferred. Resume upon request. 15 Kensington Court Place, London W8, phone OI-937-2900.

Architect: Small independent architectural firm, diversified experience in design and production, seeking partner/associate in Massachusetts area with existing practice to enter into a combined venture. Reply to Box #1361-368, *Progressive Architecture.*

Architect/planner: M. Arch., M.C.P., Assoc. A.I.P. Family, age 40, three languages. Twenty years wide diversified experience in the U.S. and Europe. Building design, working drawings, urban and regional planning projects, teaching, research. Available immediately for U.S. or Europe. Prefer permanent position with partnership potential. Reply to Box #1361-369, *Progressive Architecture.*

Architect-urban designer: B. Arch., Master Architecture and Urban Design, age 25, married. Two years office experience as project designer. Experience in planning, institutional and housing. Desire position with architectural-planning firm on the East Coast. Resume and references available. Reply to Box #1361-370, *Progressive Architecture.*

Architect/urban planner: Degrees and A.I.A., A.I.P., age 32, married. 11 years experience in design of buildings and project planning: client-contact, project development, large scale project management, economic development studies, land finance, computers and financial participation analysis. Registration includes N.J. and Penn. Reply to Box #1361-371, *Progressive Architecture.*

Architectural team: One architect, 17 years private practice, A.I.A., NCARB; wife (legal secretary); one architectural draftsman, midway in registration; wife (nurse). Work in all aspects of architecture; mobile; willing to travel to most parts of the world. Reply to Box #1361-372, *Progressive Architecture.*

Contract interior designer: Young lady, single, 12 years experience from concept to final inspection in commercial and institutional projects, including 4 years of architectural employment. Seeking responsible position; all phases design, board work, client presentation and administrative duties. Geographical location open; resume on request. Reply to Box #1361-373, *Progressive Architecture.*

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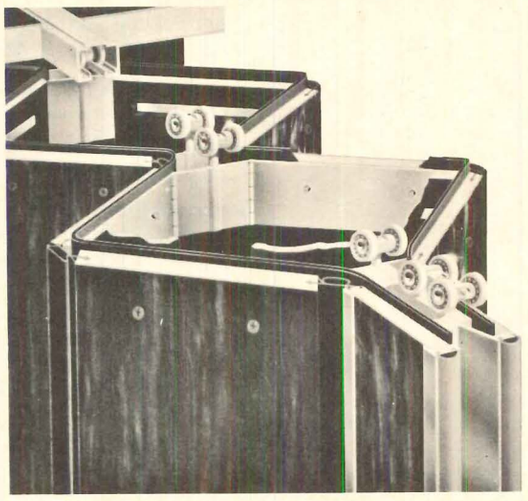
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Land development: 33, B. Arch., M. Urban Design. Strong experience: major residential and recreation new community projects. Master planning, environmental studies, zoning, site planning, multi-family and townhouse design, urban design, project management. Currently Associate in large consulting firm. Seek responsible position with developer or consultant. Reply to Box #1361-375, *Progressive Architecture.*

Registered architect/planner: 34, seeking responsible challenging position with firms in the industrialized building components field. Eight years of diversified experience with quality architectural and engineering offices in New York City. NYC or lower Connecticut location preferred. Reply to Box 1361-323, *Progressive Architecture.*

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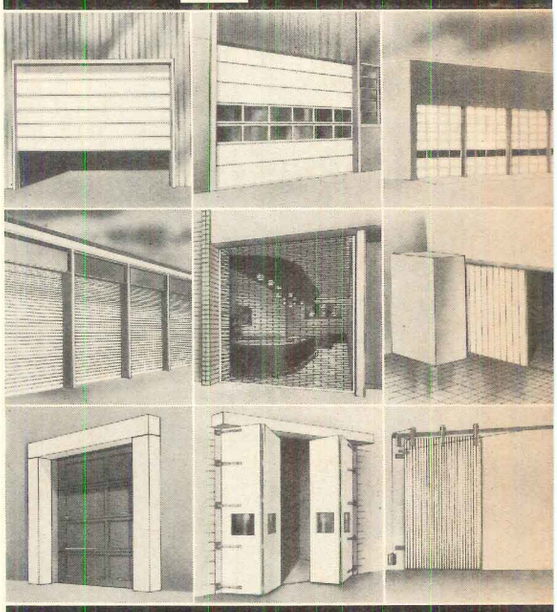
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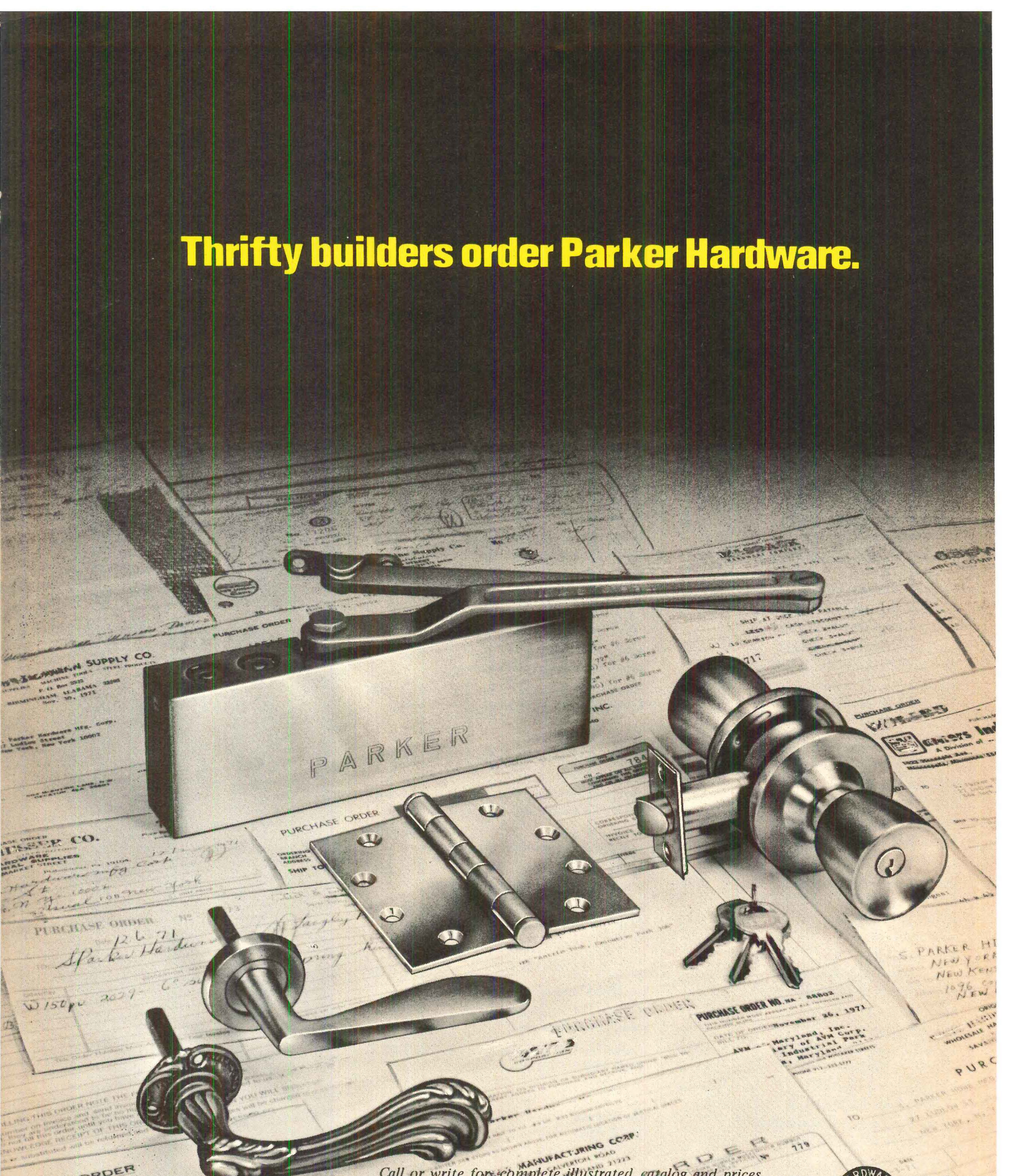
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